# clusteringmodel

April 19, 2024

# 1 Week 9-1: Unsupervised Machine Learning

Van Pjotr en Sennen.

Deze week hebben we het over ongesuperviseerde machine learning. Dit is een vorm van machine learning waarbij we geen gelabelde data hebben. Dit betekent dat we geen data hebben waarbij we weten wat de juiste output is. In plaats daarvan gaan we op zoek naar patronen in de data. Dit kan bijvoorbeeld zijn dat we clusters van data vinden, of dat we de data kunnen reduceren naar een kleinere dimensie.

Maar deze keer gaan we clustering gebruiken, een techniek waarbij we data in groepen verdelen. Dit kan bijvoorbeeld handig zijn als we een dataset hebben met verschillende soorten bloemen, en we willen weten welke bloemen bij elkaar horen. Of als we een dataset hebben met verschillende soorten klanten, en we willen weten welke klanten bij elkaar horen.

PR9-1: Great Outdoors wil graag weten in welke segmenten verkoopafdelingen ('sales\_branches') opgedeeld kan worden. Er bestaan al retailersegmenten (table 'retailer\_segment'), Great Outdoors wil dus óók segmenten creëren voor verkoopafdelingen: - Pas waar nodig Dummy Encoding toe. - Train het initiële clustermodel. - Experimenteer met meerdere k's door het berekenen van de interen intraclusterafstand.

Maar eerst een voorbeeld met de titanic.

### 1.1 Bibliotheken importeren

```
[]: import pandas as pd
import sqlite3
from sklearn.cluster import KMeans
import math
import matplotlib.pyplot as plt
import warnings
import numpy as np
warnings.simplefilter('ignore')
```

#### 1.2 Data inlezen en kolommen selecteren

```
[]: df = pd.read_csv("data/titanic2.csv", sep = ';')
df = df.filter(regex='^(?!Unnamed).*$')
df
```

```
[]:
          PassengerId Pclass
                                                                                   Name
                                                              Braund; Mr. Owen Harris
     0
                      1
                              3
                     2
                              1
                                  Cumings; Mrs. John Bradley (Florence Briggs Th ...
     1
     2
                     3
                              3
                                                               Heikkinen; Miss. Laina
     3
                     4
                              1
                                       Futrelle; Mrs. Jacques Heath (Lily May Peel)
     4
                     5
                              3
                                                             Allen; Mr. William Henry
     . .
                              2
                                                                Montvila; Rev. Juozas
     886
                   887
     887
                   888
                              1
                                                         Graham; Miss. Margaret Edith
     888
                   889
                                            Johnston; Miss. Catherine Helen "Carrie"
                              3
     889
                   890
                              1
                                                                Behr; Mr. Karl Howell
     890
                   891
                              3
                                                                   Dooley; Mr. Patrick
              Sex
                   SibSp
                           Parch
                                              Ticket
                                                          Fare Cabin Embarked
                                                                                 Survived
     0
            male
                        1
                               0
                                          A/5 21171
                                                          7.25
                                                                  NaN
                                                                              S
                                                                                         0
                                                                              С
          female
                               0
                                                                  C85
                                                                                         1
     1
                        1
                                           PC 17599
                                                       712.833
     2
          female
                        0
                               0
                                   STON/02. 3101282
                                                         7.925
                                                                 NaN
                                                                              S
                                                                                         1
          female
                                                          53.1
                                                                C123
     3
                        1
                               0
                                              113803
                                                                              S
                                                                                         1
     4
             male
                        0
                               0
                                              373450
                                                          8.05
                                                                  NaN
                                                                              S
                                                                                         0
                                                  •••
                                                                              S
                                                                                         0
     886
             male
                        0
                               0
                                              211536
                                                            13
                                                                  NaN
     887
          female
                        0
                               0
                                                            30
                                                                  B42
                                                                              S
                                                                                         1
                                              112053
          female
                                                                              S
     888
                        1
                               2
                                         W./C. 6607
                                                         23.45
                                                                  NaN
                                                                                         0
                                                                              С
     889
            male
                        0
                                              111369
                                                            30
                                                                C148
                                                                                         1
                               0
                                              370376
     890
            male
                        0
                               0
                                                          7.75
                                                                  NaN
                                                                              Q
                                                                                         0
          Age
     0
           22
           38
     1
     2
           26
     3
           35
     4
           35
     . .
     886
           27
     887
           19
     888
            15
     889
            26
     890
           32
     [891 rows x 12 columns]
[]: df = df.loc[:, ['Pclass', 'Sex', 'Age', 'Survived']]
     df
[]:
          Pclass
                      Sex
                            Age
                                 Survived
                     male
                             22
     0
                3
                                         0
                             38
                                         1
     1
                1
                   female
```

```
2
           3
               female
                          26
                                       1
3
            1
              female
                          35
                                       1
4
           3
                 male
                          35
                                       0
                ... ...
. .
           2
                                       0
886
                 male
                          27
887
               female
                                       1
           1
                          19
            3
               female
                                       0
888
                          15
889
            1
                 male
                          26
                                       1
890
           3
                 male
                                       0
                          32
```

[891 rows x 4 columns]

### 1.3 One-hot encoding van onafhankelijke niet-numerieke variabelen

```
[]: df['Pclass'] = df['Pclass'].astype(str)
     df.dtypes
[]: Pclass
                 object
     Sex
                 object
                  int64
     Age
     Survived
                  int64
     dtype: object
[]: dummies_dataframe = pd.get_dummies(df.loc[:, ['Sex', 'Pclass']])
     dummies_dataframe
[]:
          Sex_female
                      Sex_male
                                Pclass_1 Pclass_2
                                                    Pclass_3
               False
                          True
                                   False
                                              False
                                                         True
     0
                                    True
                                                        False
     1
                True
                         False
                                              False
                         False
     2
                True
                                   False
                                              False
                                                         True
     3
                True
                         False
                                    True
                                                        False
                                              False
     4
                                   False
                                                         True
               False
                          True
                                              False
                 •••
     . .
                                   False
                                                        False
     886
               False
                          True
                                              True
     887
                True
                         False
                                    True
                                             False
                                                        False
                                                         True
     888
                True
                         False
                                   False
                                             False
     889
               False
                                             False
                                                        False
                          True
                                    True
     890
               False
                          True
                                   False
                                             False
                                                         True
     [891 rows x 5 columns]
[]: df = pd.concat([df, dummies_dataframe], axis = 1)
     df = df.drop(['Sex'], axis = 1)
     df = df.loc[:, ['Pclass_1', 'Pclass_2', 'Pclass_3', 'Sex_female', 'Sex_male', "
      df
```

```
[]:
           Pclass_1 Pclass_2 Pclass_3 Sex_female
                                                         Sex_male
                                                                          Survived
                                                                     Age
     0
              False
                         False
                                     True
                                                  False
                                                              True
                                                                      22
                                                                                  0
     1
               True
                         False
                                    False
                                                   True
                                                             False
                                                                                  1
                                                                      38
     2
              False
                         False
                                     True
                                                   True
                                                             False
                                                                      26
                                                                                  1
     3
               True
                         False
                                    False
                                                   True
                                                             False
                                                                      35
                                                                                  1
     4
                                                                                  0
              False
                         False
                                     True
                                                  False
                                                              True
                                                                      35
                •••
                                                      •••
     886
              False
                          True
                                    False
                                                  False
                                                              True
                                                                      27
                                                                                  0
     887
               True
                         False
                                    False
                                                   True
                                                             False
                                                                      19
                                                                                  1
     888
              False
                         False
                                     True
                                                   True
                                                             False
                                                                      15
                                                                                  0
     889
               True
                         False
                                    False
                                                  False
                                                              True
                                                                      26
                                                                                  1
     890
              False
                                                                      32
                                                                                  0
                         False
                                     True
                                                  False
                                                              True
```

[891 rows x 7 columns]

## 1.4 Clusteringmodel bouwen met 2 dimensies

```
[]: df_2d = df.loc[:, ['Age', 'Survived']] df_2d
```

```
[]:
            Age
                  Survived
             22
                           0
      1
             38
                           1
      2
             26
                           1
      3
             35
                           1
      4
                           0
             35
      . .
      886
             27
                           0
      887
             19
                           1
      888
                           0
             15
      889
             26
                           1
      890
             32
                           0
```

[891 rows x 2 columns]

```
[]: kmeans = KMeans(n_clusters = 3, random_state = 42)
kmeans.fit_predict(df_2d)
```

```
2, 0, 2, 1, 2, 2, 2, 1, 2, 2, 1, 2, 2, 2, 2, 2, 2, 1, 2, 0, 1, 2,
           2, 2, 0, 2, 1, 2, 2, 2, 2, 2, 1, 1, 2, 0, 2, 1, 2, 0, 0, 2, 2,
           2, 0, 2, 0, 2, 0, 2, 2, 2, 2, 0, 0, 1, 1, 1, 1, 0, 1, 1, 1, 1, 0,
           2, 2, 2, 0, 2, 2, 1, 2, 2, 1, 2, 2, 0, 2, 2, 0, 1, 2, 1, 2, 2, 0,
           1, 1, 2, 0, 1, 1, 2, 2, 1, 1, 0, 2, 2, 2, 2, 2, 2, 1, 0, 2, 0, 1,
           0, 2, 1, 2, 0, 2, 1, 1, 2, 2, 1, 2, 1, 2, 1, 1, 1, 2, 2, 0, 0, 0,
           0, 1, 0, 2, 0, 0, 2, 0, 2, 1, 0, 0, 2, 1, 0, 2, 0, 2, 0, 2, 0,
           2, 1, 0, 2, 2, 2, 0, 2, 0, 2, 1, 0, 0, 1, 1, 1, 2, 1, 1, 1, 2, 0,
           2, 0, 1, 0, 2, 2, 0, 1, 2, 0, 1, 2, 2, 1, 2, 0, 1, 0, 0, 2, 1, 2,
           1, 0, 2, 2, 1, 0, 0, 2, 0, 1, 2, 1, 2, 1, 1, 2, 1, 1, 1, 1, 1, 1, 2,
           1, 1, 1, 2, 1, 1, 1, 1, 2, 2, 2, 0, 0, 2, 2, 2, 0, 0, 0, 2, 1, 1,
           2, 2, 2, 1, 2, 0, 2, 0, 1, 1, 0, 2, 1, 2, 2, 2, 0, 0, 2, 2, 0, 0,
           2, 2, 2, 2, 2, 2, 1, 2, 1, 2, 2, 2, 2, 2, 0, 2, 1, 2, 2, 1, 1,
           2, 0, 0, 1, 0, 1, 2, 0, 1, 2, 1, 0, 2, 0, 0, 2, 1, 1, 0, 1, 2, 0,
           0, 2, 1, 0, 0, 1, 1, 1, 2, 2, 1, 2, 2, 1, 1, 2, 0, 2, 1, 2, 1, 1,
           2, 1, 0, 0, 2, 2, 1, 2, 2, 2, 1, 2, 1, 0, 1, 1, 0, 1, 2, 1, 1, 1,
           2, 2, 1, 1, 1, 1, 2, 1, 1, 1, 2, 2, 2, 2, 0, 2, 2, 1, 1, 1, 2, 2,
           2, 2, 0, 2, 2, 2, 0, 0, 0, 1, 1, 0, 2, 1, 1, 1, 2, 1, 0, 2, 2, 2,
           2, 1, 0, 2, 0, 1, 1, 1, 0, 1, 0, 0, 0, 0, 0, 0, 0, 2, 0, 2, 0, 1,
           1, 2, 1, 2, 0, 2, 2, 0, 1, 0, 2, 2, 1, 2, 0, 0, 2, 0, 1, 2, 2, 2,
           0, 0, 1, 2, 0, 0, 0, 0, 2, 0, 2, 1, 1, 1, 2, 1, 2, 0, 2, 0, 2,
           2, 2, 1, 2, 0, 2, 2, 2, 1, 2, 1, 0, 2, 2, 2, 2, 0, 0, 2, 1, 2, 0,
           2, 2, 2, 2, 0, 2, 0, 0, 2, 1, 2, 1, 1, 1, 2, 0, 2, 2, 1, 0, 2,
           0, 2, 0, 0, 2, 0, 1, 1, 2, 0, 2, 2, 1, 2, 0, 2, 0, 1, 1, 2, 1, 2,
           2, 1, 1, 1, 1, 0, 1, 0, 1, 1, 0, 0, 2, 1, 2, 2, 0, 0, 0, 1, 1, 0,
           1, 1, 2, 2, 1, 2, 2, 2, 2, 2, 0, 2, 2, 2, 0, 2, 2, 2, 2, 2, 0,
           2, 1, 0, 2, 1, 0, 1, 2, 2, 2, 0, 1, 1, 0, 1, 1, 0, 1, 0, 0, 0, 2,
           0, 0, 2, 0, 0, 0, 2, 2, 0, 2, 0, 2, 2, 0, 0, 1, 0, 0, 1, 0, 1, 1,
           2, 0, 2, 0, 1, 0, 2, 2, 2, 2, 0, 0, 2, 1, 2, 1, 2, 0, 0, 0, 1,
           2, 2, 0, 2, 2, 2, 2, 0, 0, 2, 2])
[]: kmeans_centra = pd.DataFrame(kmeans.cluster_centers_)
    kmeans centra
[]:
                0
                          1
    0 15.992481
                  0.379699
    1 54.156682
                  0.354839
    2 31.632353 0.401961
[]: for i in range(len(kmeans_centra.columns)):
         kmeans_centra = kmeans_centra.rename(columns = {i : f'{df_2d.columns[i]}'})
    kmeans_centra
```

```
[]:
             Age Survived
    0 15.992481 0.379699
    1 54.156682 0.354839
    2 31.632353 0.401961
[]: for src_index, _ in df_2d.iterrows():
        euclidian_distances = dict()
        print(f"Afstand van bronindex {src_index} tot...")
        for centrumindex, _ in kmeans_centra.iterrows():
            print(f"\tCentrumindex {centrumindex}:")
            euclidian sum = 0
            for column name in kmeans centra.columns:
                current_difference = df_2d.at[src_index, column_name] -_
      print(f'\t\t{df_2d.at[src_index, column_name]} - {kmeans_centra.
      →at[centrumindex, column_name] = {current_difference}')
                euclidian_sum += current_difference ** 2
            print(f'\tTotale euclidische som: {euclidian_sum}')
            euclidian_distance = math.sqrt(euclidian_sum)
            print(f'\tEuclidische afstand: {euclidian_distance}')
            euclidian_distances[centrumindex] = euclidian_distance
        print(euclidian_distances)
        centrum_number = min(euclidian_distances, key = euclidian_distances.get)
        print(centrum_number)
        df_2d.at[src_index, 'Centrum'] = centrum_number
        print("======="")
    df 2d
    Afstand van bronindex 0 tot...
           Centrumindex 0:
                   22 - 15.992481203007529 = 6.007518796992471
                   0 - 0.3796992481203007 = -0.3796992481203007
           Totale euclidische som: 36.234453615240994
           Euclidische afstand: 6.0195060939616125
           Centrumindex 1:
                   22 - 54.156682027649765 = -32.156682027649765
                   0 - 0.3548387096774193 = -0.3548387096774193
           Totale euclidische som: 1034.178109537259
           Euclidische afstand: 32.15863973393867
           Centrumindex 2:
```

```
22 - 31.63235294117647 = -9.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 92.94379565551712
      Euclidische afstand: 9.640736261070371
  ______
{0: 6.0195060939616125, 1: 32.15863973393867, 2: 9.640736261070371}
  -----
Afstand van bronindex 1 tot...
      Centrumindex 0:
             38 - 15.992481203007529 = 22.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 484.71565662275947
      Euclidische afstand: 22.016258915237152
       -----
      Centrumindex 1:
             38 - 54.156682027649765 = -16.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 261.45460723311163
      Euclidische afstand: 16.169558040747795
          -----
      Centrumindex 2:
             38 - 31.63235294117647 = 6.367647058823529
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 40.90457996924259
      Euclidische afstand: 6.395668844557432
 _____
{0: 22.016258915237152, 1: 16.169558040747795, 2: 6.395668844557432}
_____
Afstand van bronindex 2 tot...
      Centrumindex 0:
             26 - 15.992481203007529 = 10.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 100.53520549494016
      Euclidische afstand: 10.026724564629276
      Centrumindex 1:
             26 - 54.156682027649765 = -28.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 793.2149758967059
      Euclidische afstand: 28.164072430966122
       ._____
      Centrumindex 2:
             26 - 31.63235294117647 = -5.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 32.081050557477894
```

Euclidische afstand: 5.66401364382872

```
{0: 10.026724564629276, 1: 28.164072430966122, 2: 5.66401364382872}
_____
Afstand van bronindex 3 tot...
      Centrumindex 0:
             35 - 15.992481203007529 = 19.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 361.6705438408046
      Euclidische afstand: 19.017637704005317
         _____
      Centrumindex 1:
             35 - 54.156682027649765 = -19.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 367.3946993990102
      Euclidische afstand: 19.16754286284526
 _____
      Centrumindex 2:
             35 - 31.63235294117647 = 3.367647058823529
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 11.69869761630142
      Euclidische afstand: 3.420335892321311
  -----
{0: 19.017637704005317, 1: 19.16754286284526, 2: 3.420335892321311}
_____
Afstand van bronindex 4 tot...
      Centrumindex 0:
             35 - 15.992481203007529 = 19.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 361.42994233704525
      Euclidische afstand: 19.01131090527545
      Centrumindex 1:
             35 - 54.156682027649765 = -19.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 367.1043768183651
      Euclidische afstand: 19.15996807978461
      Centrumindex 2:
             35 - 31.63235294117647 = 3.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 11.50261918492887
      Euclidische afstand: 3.391551147326083
   _____
{0: 19.01131090527545, 1: 19.15996807978461, 2: 3.391551147326083}
```

\_\_\_\_\_\_

```
Afstand van bronindex 5 tot...
       Centrumindex 0:
               36 - 15.992481203007529 = 20.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 400.4449799310302
       Euclidische afstand: 20.011121406133896
       Centrumindex 1:
               36 - 54.156682027649765 = -18.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 329.79101276306557
       Euclidische afstand: 18.160149029208586
       Centrumindex 2:
               36 - 31.63235294117647 = 4.367647058823529
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 19.23791330257593
       Euclidische afstand: 4.386104570410506
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
   _____
Afstand van bronindex 6 tot...
       Centrumindex 0:
               54 - 15.992481203007529 = 38.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1444.715656622759
       Euclidische afstand: 38.009415368073725
        ._____
       Centrumindex 1:
               54 - 54.156682027649765 = -0.15668202764976513
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 0.15045976767397765
       Euclidische afstand: 0.38789143800034775
       Centrumindex 2:
               54 - 31.63235294117647 = 22.36764705882353
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 500.473207420223
       Euclidische afstand: 22.371258512212115
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
______
Afstand van bronindex 7 tot...
       Centrumindex 0:
               2 - 15.992481203007529 = -13.992481203007529
```

0 - 0.3796992481203007 = -0.3796992481203007

```
Totale euclidische som: 195.93370173554214
      Euclidische afstand: 13.997632004576422
      Centrumindex 1:
              2 - 54.156682027649765 = -52.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 2720.4453906432495
      Euclidische afstand: 52.1578890547082
   _____
      Centrumindex 2:
              2 - 31.63235294117647 = -29.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 878.237913302576
      Euclidische afstand: 29.63507910066339
  ______
{0: 13.997632004576422, 1: 52.1578890547082, 2: 29.63507910066339}
_____
Afstand van bronindex 8 tot...
      Centrumindex 0:
              27 - 15.992481203007529 = 11.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 121.5502430889251
      Euclidische afstand: 11.02498267975624
 ._____
       Centrumindex 1:
              27 - 54.156682027649765 = -27.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 737.9016118414064
      Euclidische afstand: 27.16434449496999
 ._____
       Centrumindex 2:
              27 - 31.63235294117647 = -4.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 21.816344675124956
      Euclidische afstand: 4.67079700641389
{0: 11.02498267975624, 1: 27.16434449496999, 2: 4.67079700641389}
Afstand van bronindex 9 tot...
      Centrumindex 0:
              14 - 15.992481203007529 = -1.9924812030075287
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 4.354754367120849
      Euclidische afstand: 2.0868048224788174
```

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Centrumindex 1:

```
14 - 54.156682027649765 = -40.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1612.9753445603005
      Euclidische afstand: 40.16186430633295
         -----
      Centrumindex 2:
             14 - 31.63235294117647 = -17.63235294117647
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 311.2575211457132
      Euclidische afstand: 17.64249191995601
  _____
{0: 2.0868048224788174, 1: 40.16186430633295, 2: 17.64249191995601}
______
Afstand van bronindex 10 tot...
      Centrumindex 0:
             4 - 15.992481203007529 = -11.992481203007529
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 144.20437842727142
      Euclidische afstand: 12.008512748349457
          ._____
      Centrumindex 1:
             4 - 54.156682027649765 = -50.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 2516.1089851132956
      Euclidische afstand: 50.160831184434095
      Centrumindex 2:
             4 - 31.63235294117647 = -27.63235294117647
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 763.9045799692426
      Euclidische afstand: 27.63882378049476
 _____
{0: 12.008512748349457, 1: 50.160831184434095, 2: 27.63882378049476}
   -----
Afstand van bronindex 11 tot...
      Centrumindex 0:
             58 - 15.992481203007529 = 42.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1765.0164085024585
      Euclidische afstand: 42.012098358716365
       ._____
      Centrumindex 1:
             58 - 54.156682027649765 = 3.843317972350235
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 15.187326127121018
```

Euclidische afstand: 3.8970920090653514

```
Centrumindex 2:
              58 - 31.63235294117647 = 26.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 695.6104623221838
       Euclidische afstand: 26.374428189482778
{0: 42.012098358716365, 1: 3.8970920090653514, 2: 26.374428189482778}
Afstand van bronindex 12 tot...
       Centrumindex 0:
              20 - 15.992481203007529 = 4.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 16.204378427271106
       Euclidische afstand: 4.025466237253904
       Centrumindex 1:
              20 - 54.156682027649765 = -34.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1166.804837647858
       Euclidische afstand: 34.158525109375816
 _____
       Centrumindex 2:
              20 - 31.63235294117647 = -11.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 135.473207420223
       Euclidische afstand: 11.639295830084524
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
_____
Afstand van bronindex 13 tot...
       Centrumindex 0:
              39 - 15.992481203007529 = 23.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 529.490092712985
       Euclidische afstand: 23.01065172290835
       Centrumindex 1:
              39 - 54.156682027649765 = -15.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 229.85092059716692
       Euclidische afstand: 15.160835089043312
 ______
       Centrumindex 2:
              39 - 31.63235294117647 = 7.367647058823529
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 54.4437956555171
      Euclidische afstand: 7.378603909651005
{0: 23.01065172290835, 1: 15.160835089043312, 2: 7.378603909651005}
_____
Afstand van bronindex 14 tot...
      Centrumindex 0:
              14 - 15.992481203007529 = -1.9924812030075287
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 4.114152863361451
      Euclidische afstand: 2.0283374628896076
 _____
      Centrumindex 1:
              14 - 54.156682027649765 = -40.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1612.6850219796552
      Euclidische afstand: 40.15824973750294
      Centrumindex 2:
              14 - 31.63235294117647 = -17.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 311.06144271434067
      Euclidische afstand: 17.636934050858745
  ._____
{0: 2.0283374628896076, 1: 40.15824973750294, 2: 17.636934050858745}
_____
Afstand van bronindex 15 tot...
      Centrumindex 0:
              55 - 15.992481203007529 = 39.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1521.9712957205036
      Euclidische afstand: 39.01245052185909
      Centrumindex 1:
              55 - 54.156682027649765 = 0.8433179723502349
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1.1274182930196088
      Euclidische afstand: 1.061799554068285
      Centrumindex 2:
              55 - 31.63235294117647 = 23.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 546.4045799692426
      Euclidische afstand: 23.375298500109952
  .....
```

{0: 39.01245052185909, 1: 1.061799554068285, 2: 23.375298500109952}

```
Afstand van bronindex 16 tot...
      Centrumindex 0:
              2 - 15.992481203007529 = -13.992481203007529
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 195.93370173554214
      Euclidische afstand: 13.997632004576422
   -----
      Centrumindex 1:
              2 - 54.156682027649765 = -52.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 2720.4453906432495
      Euclidische afstand: 52.1578890547082
 ______
      Centrumindex 2:
              2 - 31.63235294117647 = -29.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 878.237913302576
      Euclidische afstand: 29.63507910066339
{0: 13.997632004576422, 1: 52.1578890547082, 2: 29.63507910066339}
Afstand van bronindex 17 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 400.6855814347896
      Euclidische afstand: 20.017132198064477
 ._____
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 330.0813353437107
      Euclidische afstand: 18.168140668315807
      Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 19.433991733948478
      Euclidische afstand: 4.408400133149041
.____
{0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
_____
Afstand van bronindex 18 tot...
      Centrumindex 0:
```

```
31 - 15.992481203007529 = 15.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 225.36979196110548
       Euclidische afstand: 15.012321338191022
          -----
       Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 536.3578330395632
       Euclidische afstand: 23.159400532819564
       _____
       Centrumindex 2:
              31 - 31.63235294117647 = -0.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 0.5614427143406386
       Euclidische afstand: 0.7492948113664198
   _____
{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}
2
Afstand van bronindex 19 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 400.6855814347896
       Euclidische afstand: 20.017132198064477
 _____
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 330.0813353437107
       Euclidische afstand: 18.168140668315807
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 19.433991733948478
       Euclidische afstand: 4.408400133149041
{0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
_____
Afstand van bronindex 20 tot...
       Centrumindex 0:
              35 - 15.992481203007529 = 19.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 361.42994233704525
```

Euclidische afstand: 19.01131090527545

```
Centrumindex 1:
              35 - 54.156682027649765 = -19.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 367.1043768183651
       Euclidische afstand: 19.15996807978461
       Centrumindex 2:
              35 - 31.63235294117647 = 3.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 11.50261918492887
       Euclidische afstand: 3.391551147326083
{0: 19.01131090527545, 1: 19.15996807978461, 2: 3.391551147326083}
   -----
Afstand van bronindex 21 tot...
       Centrumindex 0:
              34 - 15.992481203007529 = 18.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 324.6555062468197
       Euclidische afstand: 18.01819930644624
 ______
       Centrumindex 1:
              34 - 54.156682027649765 = -20.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 406.70806345430975
       Euclidische afstand: 20.16700432524151
        -----
       Centrumindex 2:
              34 - 31.63235294117647 = 2.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 5.963403498654362
       Euclidische afstand: 2.4420080873441763
{0: 18.01819930644624, 1: 20.16700432524151, 2: 2.4420080873441763}
_____
Afstand van bronindex 22 tot...
       Centrumindex 0:
              15 - 15.992481203007529 = -0.9924812030075287
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1.3697919611057916
       Euclidische afstand: 1.1703811178867298
 ._____
       Centrumindex 1:
              15 - 54.156682027649765 = -39.156682027649765
```

1 - 0.3548387096774193 = 0.6451612903225807

```
Totale euclidische som: 1533.6619805050009
       Euclidische afstand: 39.16199663583307
      Centrumindex 2:
              15 - 31.63235294117647 = -16.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 276.9928152633603
      Euclidische afstand: 16.643101131200286
     -----
{0: 1.1703811178867298, 1: 39.16199663583307, 2: 16.643101131200286}
_____
Afstand van bronindex 23 tot...
      Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 144.56528068291004
      Euclidische afstand: 12.023530292011163
      Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 684.5882477861069
      Euclidische afstand: 26.164637352466915
 ._____
       Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 13.551638792772014
       Euclidische afstand: 3.6812550567397544
   _____
{0: 12.023530292011163, 1: 26.164637352466915, 2: 3.6812550567397544}
_____
Afstand van bronindex 24 tot...
      Centrumindex 0:
              8 - 15.992481203007529 = -7.992481203007529
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 64.0239272994518
      Euclidische afstand: 8.001495316467528
      Centrumindex 1:
              8 - 54.156682027649765 = -46.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 2130.5652063114526
      Euclidische afstand: 46.15804595421531
```

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Centrumindex 2:

```
8 - 31.63235294117647 = -23.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 558.6496780084583
       Euclidische afstand: 23.63577115324267
  _____
{0: 8.001495316467528, 1: 46.15804595421531, 2: 23.63577115324267}
  ._____
Afstand van bronindex 25 tot...
       Centrumindex 0:
              38 - 15.992481203007529 = 22.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 484.71565662275947
       Euclidische afstand: 22.016258915237152
       -----
       Centrumindex 1:
              38 - 54.156682027649765 = -16.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 261.45460723311163
      Euclidische afstand: 16.169558040747795
       Centrumindex 2:
              38 - 31.63235294117647 = 6.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 40.90457996924259
       Euclidische afstand: 6.395668844557432
{0: 22.016258915237152, 1: 16.169558040747795, 2: 6.395668844557432}
_____
Afstand van bronindex 26 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 400.4449799310302
       Euclidische afstand: 20.011121406133896
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 329.79101276306557
      Euclidische afstand: 18.160149029208586
        _____
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 19.23791330257593
```

Euclidische afstand: 4.386104570410506

```
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
_____
Afstand van bronindex 27 tot...
       Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 9.189340833286163
       Euclidische afstand: 3.031392556777522
          ._____
       Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1236.1182017031574
       Euclidische afstand: 35.15847268729342
  ______
       Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 159.73791330257595
       Euclidische afstand: 12.638746508359757
   _____
{0: 3.031392556777522, 1: 35.15847268729342, 2: 12.638746508359757}
Afstand van bronindex 28 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 400.6855814347896
       Euclidische afstand: 20.017132198064477
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 330.0813353437107
       Euclidische afstand: 18.168140668315807
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 19.433991733948478
       Euclidische afstand: 4.408400133149041
{0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
```

\_\_\_\_\_

```
Afstand van bronindex 29 tot...
       Centrumindex 0:
               36 - 15.992481203007529 = 20.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 400.4449799310302
       Euclidische afstand: 20.011121406133896
       Centrumindex 1:
               36 - 54.156682027649765 = -18.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 329.79101276306557
       Euclidische afstand: 18.160149029208586
       Centrumindex 2:
               36 - 31.63235294117647 = 4.367647058823529
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 19.23791330257593
       Euclidische afstand: 4.386104570410506
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
    _____
Afstand van bronindex 30 tot...
       Centrumindex 0:
               36 - 15.992481203007529 = 20.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 400.4449799310302
       Euclidische afstand: 20.011121406133896
        ______
       Centrumindex 1:
               36 - 54.156682027649765 = -18.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 329.79101276306557
       Euclidische afstand: 18.160149029208586
       Centrumindex 2:
               36 - 31.63235294117647 = 4.367647058823529
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 19.23791330257593
       Euclidische afstand: 4.386104570410506
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
______
Afstand van bronindex 31 tot...
       Centrumindex 0:
               36 - 15.992481203007529 = 20.00751879699247
```

1 - 0.3796992481203007 = 0.6203007518796992

```
Totale euclidische som: 400.6855814347896
      Euclidische afstand: 20.017132198064477
      Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 330.0813353437107
      Euclidische afstand: 18.168140668315807
   _____
      Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 19.433991733948478
      Euclidische afstand: 4.408400133149041
  -----
{0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
_____
Afstand van bronindex 32 tot...
      Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 400.6855814347896
      Euclidische afstand: 20.017132198064477
 ._____
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 330.0813353437107
      Euclidische afstand: 18.168140668315807
 ._____
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 19.433991733948478
      Euclidische afstand: 4.408400133149041
{0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
Afstand van bronindex 33 tot...
      Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 400.4449799310302
      Euclidische afstand: 20.011121406133896
```

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Centrumindex 1:

```
36 - 54.156682027649765 = -18.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 329.79101276306557
      Euclidische afstand: 18.160149029208586
          ._____
      Centrumindex 2:
             36 - 31.63235294117647 = 4.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 19.23791330257593
      Euclidische afstand: 4.386104570410506
  _____
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
______
Afstand van bronindex 34 tot...
      Centrumindex 0:
             36 - 15.992481203007529 = 20.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 400.4449799310302
      Euclidische afstand: 20.011121406133896
          ._____
      Centrumindex 1:
             36 - 54.156682027649765 = -18.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 329.79101276306557
      Euclidische afstand: 18.160149029208586
      Centrumindex 2:
             36 - 31.63235294117647 = 4.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 19.23791330257593
      Euclidische afstand: 4.386104570410506
  ______
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
  _____
Afstand van bronindex 35 tot...
      Centrumindex 0:
             36 - 15.992481203007529 = 20.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 400.4449799310302
      Euclidische afstand: 20.011121406133896
       _____
      Centrumindex 1:
             36 - 54.156682027649765 = -18.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 329.79101276306557
```

Euclidische afstand: 18.160149029208586

```
Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 19.23791330257593
       Euclidische afstand: 4.386104570410506
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
Afstand van bronindex 36 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 400.6855814347896
       Euclidische afstand: 20.017132198064477
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 330.0813353437107
       Euclidische afstand: 18.168140668315807
 _____
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 19.433991733948478
       Euclidische afstand: 4.408400133149041
{0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
_____
Afstand van bronindex 37 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 400.4449799310302
       Euclidische afstand: 20.011121406133896
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 329.79101276306557
       Euclidische afstand: 18.160149029208586
 ._____
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 19.23791330257593
       Euclidische afstand: 4.386104570410506
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
_____
Afstand van bronindex 38 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 400.4449799310302
       Euclidische afstand: 20.011121406133896
 _____
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 329.79101276306557
       Euclidische afstand: 18.160149029208586
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 19.23791330257593
       Euclidische afstand: 4.386104570410506
   _____
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
_____
Afstand van bronindex 39 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 400.6855814347896
      Euclidische afstand: 20.017132198064477
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 330.0813353437107
       Euclidische afstand: 18.168140668315807
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 19.433991733948478
       Euclidische afstand: 4.408400133149041
  -----
{0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
```

```
_____
Afstand van bronindex 40 tot...
      Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 400.4449799310302
      Euclidische afstand: 20.011121406133896
   _____
      Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 329.79101276306557
      Euclidische afstand: 18.160149029208586
       _____
      Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 19.23791330257593
      Euclidische afstand: 4.386104570410506
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
Afstand van bronindex 41 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 400.4449799310302
      Euclidische afstand: 20.011121406133896
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 329.79101276306557
      Euclidische afstand: 18.160149029208586
      Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 19.23791330257593
      Euclidische afstand: 4.386104570410506
 _____
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
_____
Afstand van bronindex 42 tot...
      Centrumindex 0:
```

```
36 - 15.992481203007529 = 20.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 400.4449799310302
       Euclidische afstand: 20.011121406133896
          -----
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 329.79101276306557
       Euclidische afstand: 18.160149029208586
          _____
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 19.23791330257593
       Euclidische afstand: 4.386104570410506
    ._____
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
2
Afstand van bronindex 43 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 400.6855814347896
       Euclidische afstand: 20.017132198064477
 _____
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 330.0813353437107
       Euclidische afstand: 18.168140668315807
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 19.433991733948478
       Euclidische afstand: 4.408400133149041
{0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
_____
Afstand van bronindex 44 tot...
       Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 9.429942337045562
```

Euclidische afstand: 3.0708211177217017

```
Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1236.4085242838028
       Euclidische afstand: 35.16260121611885
       Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 159.93399173394852
       Euclidische afstand: 12.64650116569593
{0: 3.0708211177217017, 1: 35.16260121611885, 2: 12.64650116569593}
  _____
Afstand van bronindex 45 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 400.4449799310302
       Euclidische afstand: 20.011121406133896
 -----
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 329.79101276306557
       Euclidische afstand: 18.160149029208586
         ._____
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 19.23791330257593
       Euclidische afstand: 4.386104570410506
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
_____
Afstand van bronindex 46 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 400.4449799310302
       Euclidische afstand: 20.011121406133896
 _____
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
```

0 - 0.3548387096774193 = -0.3548387096774193

```
Totale euclidische som: 329.79101276306557
       Euclidische afstand: 18.160149029208586
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 19.23791330257593
       Euclidische afstand: 4.386104570410506
     -----
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
_____
Afstand van bronindex 47 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 400.6855814347896
       Euclidische afstand: 20.017132198064477
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 330.0813353437107
       Euclidische afstand: 18.168140668315807
 ._____
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 19.433991733948478
       Euclidische afstand: 4.408400133149041
{0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
_____
Afstand van bronindex 48 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 400.4449799310302
       Euclidische afstand: 20.011121406133896
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 329.79101276306557
       Euclidische afstand: 18.160149029208586
```

28

Centrumindex 2:

```
36 - 31.63235294117647 = 4.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 19.23791330257593
      Euclidische afstand: 4.386104570410506
  _____
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
------
Afstand van bronindex 49 tot...
      Centrumindex 0:
             18 - 15.992481203007529 = 2.0075187969924713
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 4.174303239301221
      Euclidische afstand: 2.0431111666527646
       -----
      Centrumindex 1:
             18 - 54.156682027649765 = -36.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1307.431565758457
      Euclidische afstand: 36.15842316471305
          ._____
      Centrumindex 2:
             18 - 31.63235294117647 = -13.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 186.00261918492888
      Euclidische afstand: 13.638277720626196
 -----
{0: 2.0431111666527646, 1: 36.15842316471305, 2: 13.638277720626196}
_____
Afstand van bronindex 50 tot...
      Centrumindex 0:
             7 - 15.992481203007529 = -8.992481203007529
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 81.00888970546684
      Euclidische afstand: 9.00049385897612
      Centrumindex 1:
             7 - 54.156682027649765 = -47.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 2223.8785703667522
      Euclidische afstand: 47.158017031749246
       ._____
      Centrumindex 2:
             7 - 31.63235294117647 = -24.63235294117647
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 606.9143838908112
```

Euclidische afstand: 24.635632402899894

```
{0: 9.00049385897612, 1: 47.158017031749246, 2: 24.635632402899894}
_____
Afstand van bronindex 51 tot...
      Centrumindex 0:
             21 - 15.992481203007529 = 5.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 25.21941602125605
      Euclidische afstand: 5.021893668852025
          -----
      Centrumindex 1:
             21 - 54.156682027649765 = -33.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1099.4914735925583
      Euclidische afstand: 33.15858069327694
  _____
      Centrumindex 2:
             21 - 31.63235294117647 = -10.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 113.20850153787006
      Euclidische afstand: 10.639948380413792
  -----
{0: 5.021893668852025, 1: 33.15858069327694, 2: 10.639948380413792}
_____
Afstand van bronindex 52 tot...
      Centrumindex 0:
             49 - 15.992481203007529 = 33.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1089.881070156594
      Euclidische afstand: 33.01334684876094
      Centrumindex 1:
             49 - 54.156682027649765 = -5.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 27.00760262481679
      Euclidische afstand: 5.1968839341298345
      Centrumindex 2:
             49 - 31.63235294117647 = 17.36764705882353
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 301.9928152633602
      Euclidische afstand: 17.37794047818556
    _____
{0: 33.01334684876094, 1: 5.1968839341298345, 2: 17.37794047818556}
```

\_\_\_\_\_

```
Afstand van bronindex 53 tot...
       Centrumindex 0:
               29 - 15.992481203007529 = 13.007518796992471
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 169.58031827689499
       Euclidische afstand: 13.022300805805976
       Centrumindex 1:
               29 - 54.156682027649765 = -25.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 633.2748837308073
       Euclidische afstand: 25.164953481594345
       Centrumindex 2:
               29 - 31.63235294117647 = -2.632352941176471
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 7.286932910419072
       Euclidische afstand: 2.6994319606945223
{0: 13.022300805805976, 1: 25.164953481594345, 2: 2.6994319606945223}
    _____
Afstand van bronindex 54 tot...
       Centrumindex 0:
               65 - 15.992481203007529 = 49.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 2401.8810701565935
       Euclidische afstand: 49.00898968716447
        _____
       Centrumindex 1:
               65 - 54.156682027649765 = 10.843317972350235
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 117.70345515937915
       Euclidische afstand: 10.849122322076525
       Centrumindex 2:
               65 - 31.63235294117647 = 33.36764705882353
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 1113.5614427143407
       Euclidische afstand: 33.37006806577327
{0: 49.00898968716447, 1: 10.849122322076525, 2: 33.37006806577327}
______
Afstand van bronindex 55 tot...
       Centrumindex 0:
               36 - 15.992481203007529 = 20.00751879699247
```

1 - 0.3796992481203007 = 0.6203007518796992

```
Totale euclidische som: 400.6855814347896
       Euclidische afstand: 20.017132198064477
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 330.0813353437107
       Euclidische afstand: 18.168140668315807
  -----
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 19.433991733948478
       Euclidische afstand: 4.408400133149041
  -----
{0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
_____
Afstand van bronindex 56 tot...
      Centrumindex 0:
              21 - 15.992481203007529 = 5.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 25.46001752501545
       Euclidische afstand: 5.0457920612145175
 ._____
       Centrumindex 1:
              21 - 54.156682027649765 = -33.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1099.7817961732037
       Euclidische afstand: 33.162958193942885
 ._____
       Centrumindex 2:
              21 - 31.63235294117647 = -10.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 113.4045799692426
       Euclidische afstand: 10.649158650768737
{0: 5.0457920612145175, 1: 33.162958193942885, 2: 10.649158650768737}
Afstand van bronindex 57 tot...
       Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 144.32467917915065
       Euclidische afstand: 12.013520682096097
```

Centrumindex 1:

```
28 - 54.156682027649765 = -26.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 684.2979252054618
      Euclidische afstand: 26.1590887686376
         -----
      Centrumindex 2:
             28 - 31.63235294117647 = -3.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 13.355560361399464
      Euclidische afstand: 3.6545260104970474
  _____
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
______
Afstand van bronindex 58 tot...
      Centrumindex 0:
             5 - 15.992481203007529 = -10.992481203007529
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 121.21941602125636
      Euclidische afstand: 11.009968938251205
          ._____
      Centrumindex 1:
             5 - 54.156682027649765 = -49.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 2416.795621057996
      Euclidische afstand: 49.16091558400836
      Centrumindex 2:
             5 - 31.63235294117647 = -26.63235294117647
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 709.6398740868897
      Euclidische afstand: 26.639066689486132
  -----
{0: 11.009968938251205, 1: 49.16091558400836, 2: 26.639066689486132}
  _____
Afstand van bronindex 59 tot...
      Centrumindex 0:
             11 - 15.992481203007529 = -4.992481203007529
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 25.069040081406623
      Euclidische afstand: 5.00689924817812
       .____
      Centrumindex 1:
             11 - 54.156682027649765 = -43.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1862.6251141455537
```

Euclidische afstand: 43.15814076330853

```
Centrumindex 2:
              11 - 31.63235294117647 = -20.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 425.8555603613995
       Euclidische afstand: 20.636268082223577
{0: 5.00689924817812, 1: 43.15814076330853, 2: 20.636268082223577}
Afstand van bronindex 60 tot...
       Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 36.234453615240994
       Euclidische afstand: 6.0195060939616125
       Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1034.178109537259
       Euclidische afstand: 32.15863973393867
 _____
       Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 92.94379565551712
       Euclidische afstand: 9.640736261070371
{0: 6.0195060939616125, 1: 32.15863973393867, 2: 9.640736261070371}
_____
Afstand van bronindex 61 tot...
       Centrumindex 0:
              38 - 15.992481203007529 = 22.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 484.71565662275947
       Euclidische afstand: 22.016258915237152
       Centrumindex 1:
              38 - 54.156682027649765 = -16.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 261.45460723311163
       Euclidische afstand: 16.169558040747795
 ______
       Centrumindex 2:
              38 - 31.63235294117647 = 6.367647058823529
```

1 - 0.4019607843137254 = 0.5980392156862746

```
Totale euclidische som: 40.90457996924259
      Euclidische afstand: 6.395668844557432
{0: 22.016258915237152, 1: 16.169558040747795, 2: 6.395668844557432}
2
_____
Afstand van bronindex 62 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 841.5803182768947
      Euclidische afstand: 29.010003762097217
 _____
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 83.97073626536975
      Euclidische afstand: 9.16355478323613
      Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 178.85556036139945
      Euclidische afstand: 13.373689108148113
  ._____
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
_____
Afstand van bronindex 63 tot...
      Centrumindex 0:
              4 - 15.992481203007529 = -11.992481203007529
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 143.96377692351203
      Euclidische afstand: 11.998490610218939
      Centrumindex 1:
              4 - 54.156682027649765 = -50.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 2515.8186625326507
      Euclidische afstand: 50.15793718378628
      Centrumindex 2:
              4 - 31.63235294117647 = -27.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 763.70850153787
      Euclidische afstand: 27.63527639698706
  .-----
```

{0: 11.998490610218939, 1: 50.15793718378628, 2: 27.63527639698706}

```
Afstand van bronindex 64 tot...
       Centrumindex 0:
              42 - 15.992481203007529 = 26.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 676.5352054949398
       Euclidische afstand: 26.010290376982333
   _____
       Centrumindex 1:
              42 - 54.156682027649765 = -12.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 147.91082843126833
       Euclidische afstand: 12.161859579491466
       ______
       Centrumindex 2:
              42 - 31.63235294117647 = 10.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 107.64967800845828
       Euclidische afstand: 10.375436280391215
{0: 26.010290376982333, 1: 12.161859579491466, 2: 10.375436280391215}
Afstand van bronindex 65 tot...
       Centrumindex 0:
              42 - 15.992481203007529 = 26.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 676.7758069986992
       Euclidische afstand: 26.01491508728597
 _____
       Centrumindex 1:
              42 - 54.156682027649765 = -12.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 148.2011510119135
       Euclidische afstand: 12.173789509101654
       Centrumindex 2:
              42 - 31.63235294117647 = 10.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 107.84575643983082
       Euclidische afstand: 10.38488114712108
    _____
{0: 26.01491508728597, 1: 12.173789509101654, 2: 10.38488114712108}
```

Afstand van bronindex 66 tot...

\_\_\_\_\_

Centrumindex 0:

```
29 - 15.992481203007529 = 13.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 169.58031827689499
       Euclidische afstand: 13.022300805805976
          -----
       Centrumindex 1:
              29 - 54.156682027649765 = -25.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 633.2748837308073
       Euclidische afstand: 25.164953481594345
          _____
       Centrumindex 2:
              29 - 31.63235294117647 = -2.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 7.286932910419072
       Euclidische afstand: 2.6994319606945223
    _____
{0: 13.022300805805976, 1: 25.164953481594345, 2: 2.6994319606945223}
2
Afstand van bronindex 67 tot...
       Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 9.189340833286163
       Euclidische afstand: 3.031392556777522
       Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1236.1182017031574
       Euclidische afstand: 35.15847268729342
       Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 159.73791330257595
       Euclidische afstand: 12.638746508359757
{0: 3.031392556777522, 1: 35.15847268729342, 2: 12.638746508359757}
_____
Afstand van bronindex 68 tot...
       Centrumindex 0:
              17 - 15.992481203007529 = 1.0075187969924713
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1.3998671490756767
```

Euclidische afstand: 1.183159815526067

```
Centrumindex 1:
              17 - 54.156682027649765 = -37.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1381.0352523944018
       Euclidische afstand: 37.16228265855586
       Centrumindex 2:
              17 - 31.63235294117647 = -14.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 214.4634034986544
       Euclidische afstand: 14.644569078626192
{0: 1.183159815526067, 1: 37.16228265855586, 2: 14.644569078626192}
   _____
Afstand van bronindex 69 tot...
       Centrumindex 0:
              26 - 15.992481203007529 = 10.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 100.29460399118075
       Euclidische afstand: 10.014719366571425
 ______
       Centrumindex 1:
              26 - 54.156682027649765 = -28.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 792.9246533160608
       Euclidische afstand: 28.15891782927854
         -----
       Centrumindex 2:
              26 - 31.63235294117647 = -5.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 31.88497212610535
       Euclidische afstand: 5.646677972587542
{0: 10.014719366571425, 1: 28.15891782927854, 2: 5.646677972587542}
_____
Afstand van bronindex 70 tot...
       Centrumindex 0:
              32 - 15.992481203007529 = 16.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 256.38482955509045
       Euclidische afstand: 16.01202140752661
 _____
       Centrumindex 1:
              32 - 54.156682027649765 = -22.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
```

```
Totale euclidische som: 491.0444689842637
      Euclidische afstand: 22.15952321202475
      Centrumindex 2:
              32 - 31.63235294117647 = 0.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 0.2967368319876966
      Euclidische afstand: 0.5447355615229252
     -----
{0: 16.01202140752661, 1: 22.15952321202475, 2: 0.5447355615229252}
_____
Afstand van bronindex 71 tot...
      Centrumindex 0:
              16 - 15.992481203007529 = 0.007518796992471266
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 0.14422805133133568
      Euclidische afstand: 0.3797736843586397
      Centrumindex 1:
              16 - 54.156682027649765 = -38.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1456.0582938690561
      Euclidische afstand: 38.15833190626991
 ._____
       Centrumindex 2:
              16 - 31.63235294117647 = -15.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 244.53203094963476
       Euclidische afstand: 15.637519974396028
    -----
{0: 0.3797736843586397, 1: 38.15833190626991, 2: 15.637519974396028}
_____
Afstand van bronindex 72 tot...
      Centrumindex 0:
              21 - 15.992481203007529 = 5.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 25.21941602125605
      Euclidische afstand: 5.021893668852025
      Centrumindex 1:
              21 - 54.156682027649765 = -33.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1099.4914735925583
      Euclidische afstand: 33.15858069327694
```

39

Centrumindex 2:

```
21 - 31.63235294117647 = -10.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 113.20850153787006
      Euclidische afstand: 10.639948380413792
  _____
{0: 5.021893668852025, 1: 33.15858069327694, 2: 10.639948380413792}
  -----
Afstand van bronindex 73 tot...
      Centrumindex 0:
             26 - 15.992481203007529 = 10.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 100.29460399118075
      Euclidische afstand: 10.014719366571425
       ._____
      Centrumindex 1:
             26 - 54.156682027649765 = -28.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 792.9246533160608
      Euclidische afstand: 28.15891782927854
          ._____
      Centrumindex 2:
             26 - 31.63235294117647 = -5.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 31.88497212610535
      Euclidische afstand: 5.646677972587542
 ______
{0: 10.014719366571425, 1: 28.15891782927854, 2: 5.646677972587542}
_____
Afstand van bronindex 74 tot...
      Centrumindex 0:
             32 - 15.992481203007529 = 16.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 256.6254310588498
      Euclidische afstand: 16.01953279777066
      Centrumindex 1:
             32 - 54.156682027649765 = -22.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 491.3347915649088
      Euclidische afstand: 22.166072984741994
       .____
      Centrumindex 2:
             32 - 31.63235294117647 = 0.367647058823529
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 0.49281526336024584
```

Euclidische afstand: 0.7020080222905191

```
{0: 16.01953279777066, 1: 22.166072984741994, 2: 0.7020080222905191}
_____
Afstand van bronindex 75 tot...
      Centrumindex 0:
              25 - 15.992481203007529 = 9.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 81.27956639719581
      Euclidische afstand: 9.01551808811872
       Centrumindex 1:
              25 - 54.156682027649765 = -29.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 850.2380173713603
      Euclidische afstand: 29.158841152750917
 _____
      Centrumindex 2:
              25 - 31.63235294117647 = -6.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 44.14967800845829
      Euclidische afstand: 6.644522406347825
  _____
{0: 9.01551808811872, 1: 29.158841152750917, 2: 6.644522406347825}
Afstand van bronindex 76 tot...
      Centrumindex 0:
              42 - 15.992481203007529 = 26.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 676.5352054949398
      Euclidische afstand: 26.010290376982333
      Centrumindex 1:
              42 - 54.156682027649765 = -12.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 147.91082843126833
      Euclidische afstand: 12.161859579491466
       Centrumindex 2:
              42 - 31.63235294117647 = 10.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 107.64967800845828
       Euclidische afstand: 10.375436280391215
    _____
{0: 26.010290376982333, 1: 12.161859579491466, 2: 10.375436280391215}
```

\_\_\_\_\_

```
Afstand van bronindex 77 tot...
       Centrumindex 0:
               42 - 15.992481203007529 = 26.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 676.5352054949398
       Euclidische afstand: 26.010290376982333
       Centrumindex 1:
               42 - 54.156682027649765 = -12.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 147.91082843126833
       Euclidische afstand: 12.161859579491466
       Centrumindex 2:
               42 - 31.63235294117647 = 10.367647058823529
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 107.64967800845828
       Euclidische afstand: 10.375436280391215
{0: 26.010290376982333, 1: 12.161859579491466, 2: 10.375436280391215}
    _____
Afstand van bronindex 78 tot...
       Centrumindex 0:
               83 - 15.992481203007529 = 67.00751879699247
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 4490.392348352082
       Euclidische afstand: 67.01038985375389
        _____
       Centrumindex 1:
               83 - 54.156682027649765 = 28.843317972350235
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 832.3532247446327
       Euclidische afstand: 28.8505324863274
       Centrumindex 2:
               83 - 31.63235294117647 = 51.36764705882353
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 2638.99281526336
       Euclidische afstand: 51.37112822649859
{0: 67.01038985375389, 1: 28.8505324863274, 2: 51.37112822649859}
______
Afstand van bronindex 79 tot...
       Centrumindex 0:
               30 - 15.992481203007529 = 14.007518796992471
```

1 - 0.3796992481203007 = 0.6203007518796992

```
Totale euclidische som: 196.59535587087993
      Euclidische afstand: 14.021246587621228
      Centrumindex 1:
              30 - 54.156682027649765 = -24.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 583.9615196755078
      Euclidische afstand: 24.16529577049509
  -----
      Centrumindex 2:
              30 - 31.63235294117647 = -1.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 3.02222702806613
      Euclidische afstand: 1.738455356937914
  _____
{0: 14.021246587621228, 1: 24.16529577049509, 2: 1.738455356937914}
_____
Afstand van bronindex 80 tot...
      Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 36.234453615240994
      Euclidische afstand: 6.0195060939616125
 ._____
       Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1034.178109537259
      Euclidische afstand: 32.15863973393867
 _____
       Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 92.94379565551712
      Euclidische afstand: 9.640736261070371
{0: 6.0195060939616125, 1: 32.15863973393867, 2: 9.640736261070371}
Afstand van bronindex 81 tot...
      Centrumindex 0:
              29 - 15.992481203007529 = 13.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 169.58031827689499
      Euclidische afstand: 13.022300805805976
```

Centrumindex 1:

```
29 - 54.156682027649765 = -25.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 633.2748837308073
      Euclidische afstand: 25.164953481594345
         ._____
      Centrumindex 2:
             29 - 31.63235294117647 = -2.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 7.286932910419072
      Euclidische afstand: 2.6994319606945223
  _____
{0: 13.022300805805976, 1: 25.164953481594345, 2: 2.6994319606945223}
______
Afstand van bronindex 82 tot...
      Centrumindex 0:
             25 - 15.992481203007529 = 9.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 81.52016790095522
      Euclidische afstand: 9.028851970264837
         ._____
      Centrumindex 1:
             25 - 54.156682027649765 = -29.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 850.5283399520055
      Euclidische afstand: 29.1638190220692
 _____
      Centrumindex 2:
             25 - 31.63235294117647 = -6.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 44.345756439830836
      Euclidische afstand: 6.659260952976001
 ._____
{0: 9.028851970264837, 1: 29.1638190220692, 2: 6.659260952976001}
  _____
Afstand van bronindex 83 tot...
      Centrumindex 0:
             28 - 15.992481203007529 = 12.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 144.32467917915065
      Euclidische afstand: 12.013520682096097
       _____
      Centrumindex 1:
             28 - 54.156682027649765 = -26.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 684.2979252054618
```

Euclidische afstand: 26.1590887686376

```
Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 13.355560361399464
       Euclidische afstand: 3.6545260104970474
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
Afstand van bronindex 84 tot...
       Centrumindex 0:
              17 - 15.992481203007529 = 1.0075187969924713
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1.3998671490756767
       Euclidische afstand: 1.183159815526067
       Centrumindex 1:
              17 - 54.156682027649765 = -37.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1381.0352523944018
       Euclidische afstand: 37.16228265855586
 _____
       Centrumindex 2:
              17 - 31.63235294117647 = -14.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 214.4634034986544
       Euclidische afstand: 14.644569078626192
{0: 1.183159815526067, 1: 37.16228265855586, 2: 14.644569078626192}
_____
Afstand van bronindex 85 tot...
       Centrumindex 0:
              33 - 15.992481203007529 = 17.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 289.6404686528347
       Euclidische afstand: 17.018826888268027
       Centrumindex 1:
              33 - 54.156682027649765 = -21.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 448.0214275096093
       Euclidische afstand: 21.166516659800433
 ._____
       Centrumindex 2:
              33 - 31.63235294117647 = 1.367647058823529
```

1 - 0.4019607843137254 = 0.5980392156862746

```
Totale euclidische som: 2.228109381007304
      Euclidische afstand: 1.492685292018148
{0: 17.018826888268027, 1: 21.166516659800433, 2: 1.492685292018148}
-----
Afstand van bronindex 86 tot...
       Centrumindex 0:
              16 - 15.992481203007529 = 0.007518796992471266
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 0.14422805133133568
      Euclidische afstand: 0.3797736843586397
 _____
       Centrumindex 1:
              16 - 54.156682027649765 = -38.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1456.0582938690561
      Euclidische afstand: 38.15833190626991
      Centrumindex 2:
              16 - 31.63235294117647 = -15.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 244.53203094963476
      Euclidische afstand: 15.637519974396028
  ._____
{0: 0.3797736843586397, 1: 38.15833190626991, 2: 15.637519974396028}
_____
Afstand van bronindex 87 tot...
      Centrumindex 0:
              25 - 15.992481203007529 = 9.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 81.27956639719581
      Euclidische afstand: 9.01551808811872
      Centrumindex 1:
              25 - 54.156682027649765 = -29.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 850.2380173713603
      Euclidische afstand: 29.158841152750917
      Centrumindex 2:
              25 - 31.63235294117647 = -6.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 44.14967800845829
      Euclidische afstand: 6.644522406347825
  ._____
{0: 9.01551808811872, 1: 29.158841152750917, 2: 6.644522406347825}
```

```
_____
Afstand van bronindex 88 tot...
      Centrumindex 0:
             23 - 15.992481203007529 = 7.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 49.49009271298533
      Euclidische afstand: 7.034919524272138
   -----
      Centrumindex 1:
             23 - 54.156682027649765 = -31.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 971.1550680626045
      Euclidische afstand: 31.16336098790701
 ______
      Centrumindex 2:
             23 - 31.63235294117647 = -8.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 74.87516820453672
      Euclidische afstand: 8.653043869329261
{0: 7.034919524272138, 1: 31.16336098790701, 2: 8.653043869329261}
Afstand van bronindex 89 tot...
      Centrumindex 0:
             24 - 15.992481203007529 = 8.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 64.26452880321087
      Euclidische afstand: 8.016516001556466
 ._____
      Centrumindex 1:
             24 - 54.156682027649765 = -30.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 909.5513814266599
      Euclidische afstand: 30.158769560886597
      Centrumindex 2:
             24 - 31.63235294117647 = -7.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 58.41438389081123
      Euclidische afstand: 7.642930320944397
 _____
{0: 8.016516001556466, 1: 30.158769560886597, 2: 7.642930320944397}
_____
Afstand van bronindex 90 tot...
```

Centrumindex 0:

```
29 - 15.992481203007529 = 13.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 169.3397167731356
       Euclidische afstand: 13.013059470129829
          ._____
       Centrumindex 1:
              29 - 54.156682027649765 = -25.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 632.9845611501622
       Euclidische afstand: 25.15918442935228
          _____
       Centrumindex 2:
              29 - 31.63235294117647 = -2.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 7.090854479046523
       Euclidische afstand: 2.662865839475681
   _____
{0: 13.013059470129829, 1: 25.15918442935228, 2: 2.662865839475681}
2
Afstand van bronindex 91 tot...
       Centrumindex 0:
              20 - 15.992481203007529 = 4.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 16.204378427271106
       Euclidische afstand: 4.025466237253904
 _____
       Centrumindex 1:
              20 - 54.156682027649765 = -34.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1166.804837647858
       Euclidische afstand: 34.158525109375816
       Centrumindex 2:
              20 - 31.63235294117647 = -11.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 135.473207420223
       Euclidische afstand: 11.639295830084524
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
_____
Afstand van bronindex 92 tot...
       Centrumindex 0:
              46 - 15.992481203007529 = 30.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 900.5953558708795
```

Euclidische afstand: 30.009920957424722

```
Centrumindex 1:
              46 - 54.156682027649765 = -8.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 66.65737221007022
       Euclidische afstand: 8.16439662253557
       Centrumindex 2:
              46 - 31.63235294117647 = 14.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 206.5908544790465
       Euclidische afstand: 14.373268747193398
{0: 30.009920957424722, 1: 8.16439662253557, 2: 14.373268747193398}
  _____
Afstand van bronindex 93 tot...
       Centrumindex 0:
              26 - 15.992481203007529 = 10.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 100.29460399118075
       Euclidische afstand: 10.014719366571425
 _____
       Centrumindex 1:
              26 - 54.156682027649765 = -28.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 792.9246533160608
       Euclidische afstand: 28.15891782927854
        ______
       Centrumindex 2:
              26 - 31.63235294117647 = -5.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 31.88497212610535
       Euclidische afstand: 5.646677972587542
{0: 10.014719366571425, 1: 28.15891782927854, 2: 5.646677972587542}
_____
Afstand van bronindex 94 tot...
       Centrumindex 0:
              59 - 15.992481203007529 = 43.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1849.790844592684
       Euclidische afstand: 43.00919488426497
 ._____
       Centrumindex 1:
              59 - 54.156682027649765 = 4.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
```

```
Totale euclidische som: 23.583639491176328
       Euclidische afstand: 4.856298949938763
      Centrumindex 2:
              59 - 31.63235294117647 = 27.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 749.1496780084582
      Euclidische afstand: 27.370598787904846
     -----
{0: 43.00919488426497, 1: 4.856298949938763, 2: 27.370598787904846}
_____
Afstand van bronindex 95 tot...
      Centrumindex 0:
              25 - 15.992481203007529 = 9.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 81.27956639719581
      Euclidische afstand: 9.01551808811872
      Centrumindex 1:
              25 - 54.156682027649765 = -29.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 850.2380173713603
      Euclidische afstand: 29.158841152750917
 ._____
       Centrumindex 2:
              25 - 31.63235294117647 = -6.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 44.14967800845829
       Euclidische afstand: 6.644522406347825
   _____
{0: 9.01551808811872, 1: 29.158841152750917, 2: 6.644522406347825}
_____
Afstand van bronindex 96 tot...
      Centrumindex 0:
              71 - 15.992481203007529 = 55.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 3025.9712957205033
      Euclidische afstand: 55.008829252407324
      Centrumindex 1:
              71 - 54.156682027649765 = 16.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 283.823270827582
      Euclidische afstand: 16.84705525685667
```

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Centrumindex 2:

```
71 - 31.63235294117647 = 39.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 1549.973207420223
      Euclidische afstand: 39.369699102485185
  _____
{0: 55.008829252407324, 1: 16.84705525685667, 2: 39.369699102485185}
Afstand van bronindex 97 tot...
      Centrumindex 0:
              23 - 15.992481203007529 = 7.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 49.49009271298533
      Euclidische afstand: 7.034919524272138
       -----
      Centrumindex 1:
              23 - 54.156682027649765 = -31.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 971.1550680626045
      Euclidische afstand: 31.16336098790701
          ._____
       Centrumindex 2:
              23 - 31.63235294117647 = -8.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 74.87516820453672
      Euclidische afstand: 8.653043869329261
{0: 7.034919524272138, 1: 31.16336098790701, 2: 8.653043869329261}
_____
Afstand van bronindex 98 tot...
       Centrumindex 0:
              34 - 15.992481203007529 = 18.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 324.6555062468197
      Euclidische afstand: 18.01819930644624
      Centrumindex 1:
              34 - 54.156682027649765 = -20.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 406.70806345430975
      Euclidische afstand: 20.16700432524151
       ._____
      Centrumindex 2:
              34 - 31.63235294117647 = 2.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 5.963403498654362
```

Euclidische afstand: 2.4420080873441763

```
{0: 18.01819930644624, 1: 20.16700432524151, 2: 2.4420080873441763}
_____
Afstand van bronindex 99 tot...
      Centrumindex 0:
             34 - 15.992481203007529 = 18.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 324.41490474306033
      Euclidische afstand: 18.011521444427185
          .____
      Centrumindex 1:
             34 - 54.156682027649765 = -20.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 406.4177408736646
      Euclidische afstand: 20.159805080249775
 _____
      Centrumindex 2:
             34 - 31.63235294117647 = 2.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 5.767325067281813
      Euclidische afstand: 2.401525570815729
  -----
{0: 18.011521444427185, 1: 20.159805080249775, 2: 2.401525570815729}
Afstand van bronindex 100 tot...
      Centrumindex 0:
             28 - 15.992481203007529 = 12.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 144.32467917915065
      Euclidische afstand: 12.013520682096097
      Centrumindex 1:
             28 - 54.156682027649765 = -26.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 684.2979252054618
      Euclidische afstand: 26.1590887686376
      Centrumindex 2:
             28 - 31.63235294117647 = -3.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 13.355560361399464
      Euclidische afstand: 3.6545260104970474
    -----
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
```

```
Afstand van bronindex 101 tot...
       Centrumindex 0:
               25 - 15.992481203007529 = 9.007518796992471
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 81.27956639719581
       Euclidische afstand: 9.01551808811872
       Centrumindex 1:
               25 - 54.156682027649765 = -29.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 850.2380173713603
       Euclidische afstand: 29.158841152750917
       Centrumindex 2:
               25 - 31.63235294117647 = -6.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 44.14967800845829
       Euclidische afstand: 6.644522406347825
{0: 9.01551808811872, 1: 29.158841152750917, 2: 6.644522406347825}
    -----
Afstand van bronindex 102 tot...
       Centrumindex 0:
               21 - 15.992481203007529 = 5.007518796992471
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 25.21941602125605
       Euclidische afstand: 5.021893668852025
        _____
       Centrumindex 1:
               21 - 54.156682027649765 = -33.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1099.4914735925583
       Euclidische afstand: 33.15858069327694
       Centrumindex 2:
               21 - 31.63235294117647 = -10.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 113.20850153787006
       Euclidische afstand: 10.639948380413792
{0: 5.021893668852025, 1: 33.15858069327694, 2: 10.639948380413792}
______
Afstand van bronindex 103 tot...
       Centrumindex 0:
               33 - 15.992481203007529 = 17.00751879699247
```

0 - 0.3796992481203007 = -0.3796992481203007

```
Totale euclidische som: 289.39986714907536
      Euclidische afstand: 17.011756733185297
      Centrumindex 1:
              33 - 54.156682027649765 = -21.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 447.73110492896416
      Euclidische afstand: 21.15965748609755
  -----
      Centrumindex 2:
              33 - 31.63235294117647 = 1.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.0320309496347546
      Euclidische afstand: 1.4254932303012717
  _____
{0: 17.011756733185297, 1: 21.15965748609755, 2: 1.4254932303012717}
_____
Afstand van bronindex 104 tot...
      Centrumindex 0:
              37 - 15.992481203007529 = 21.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 441.46001752501513
      Euclidische afstand: 21.01094994342272
 ._____
       Centrumindex 1:
              37 - 54.156682027649765 = -17.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 294.47764870776604
      Euclidische afstand: 17.16035106598248
 _____
       Centrumindex 2:
              37 - 31.63235294117647 = 5.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 28.973207420222987
      Euclidische afstand: 5.382676603718915
{0: 21.01094994342272, 1: 17.16035106598248, 2: 5.382676603718915}
Afstand van bronindex 105 tot...
      Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 144.32467917915065
      Euclidische afstand: 12.013520682096097
```

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Centrumindex 1:

```
28 - 54.156682027649765 = -26.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 684.2979252054618
      Euclidische afstand: 26.1590887686376
         -----
      Centrumindex 2:
             28 - 31.63235294117647 = -3.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 13.355560361399464
      Euclidische afstand: 3.6545260104970474
  _____
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
______
Afstand van bronindex 106 tot...
      Centrumindex 0:
             21 - 15.992481203007529 = 5.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 25.46001752501545
      Euclidische afstand: 5.0457920612145175
         ._____
      Centrumindex 1:
             21 - 54.156682027649765 = -33.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1099.7817961732037
      Euclidische afstand: 33.162958193942885
 _____
      Centrumindex 2:
             21 - 31.63235294117647 = -10.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 113.4045799692426
      Euclidische afstand: 10.649158650768737
  -----
{0: 5.0457920612145175, 1: 33.162958193942885, 2: 10.649158650768737}
  _____
Afstand van bronindex 107 tot...
      Centrumindex 0:
             25 - 15.992481203007529 = 9.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 81.52016790095522
      Euclidische afstand: 9.028851970264837
       _____
      Centrumindex 1:
             25 - 54.156682027649765 = -29.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 850.5283399520055
```

Euclidische afstand: 29.1638190220692

```
Centrumindex 2:
              25 - 31.63235294117647 = -6.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 44.345756439830836
       Euclidische afstand: 6.659260952976001
{0: 9.028851970264837, 1: 29.1638190220692, 2: 6.659260952976001}
Afstand van bronindex 108 tot...
       Centrumindex 0:
              38 - 15.992481203007529 = 22.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 484.4750551190001
       Euclidische afstand: 22.010794059256476
       Centrumindex 1:
              38 - 54.156682027649765 = -16.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 261.1642846524665
       Euclidische afstand: 16.160578103906634
 _____
       Centrumindex 2:
              38 - 31.63235294117647 = 6.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 40.70850153787004
       Euclidische afstand: 6.380321429040237
{0: 22.010794059256476, 1: 16.160578103906634, 2: 6.380321429040237}
_____
Afstand van bronindex 109 tot...
       Centrumindex 0:
              25 - 15.992481203007529 = 9.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 81.52016790095522
       Euclidische afstand: 9.028851970264837
       Centrumindex 1:
              25 - 54.156682027649765 = -29.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 850.5283399520055
       Euclidische afstand: 29.1638190220692
 ._____
       Centrumindex 2:
              25 - 31.63235294117647 = -6.632352941176471
```

1 - 0.4019607843137254 = 0.5980392156862746

```
Totale euclidische som: 44.345756439830836
      Euclidische afstand: 6.659260952976001
{0: 9.028851970264837, 1: 29.1638190220692, 2: 6.659260952976001}
-----
Afstand van bronindex 110 tot...
      Centrumindex 0:
              47 - 15.992481203007529 = 31.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 961.6103934648645
      Euclidische afstand: 31.00984349307272
 _____
      Centrumindex 1:
              47 - 54.156682027649765 = -7.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 51.34400815477069
      Euclidische afstand: 7.165473337803351
      Centrumindex 2:
             47 - 31.63235294117647 = 15.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 236.32614859669357
      Euclidische afstand: 15.372903063400015
  -----
{0: 31.00984349307272, 1: 7.165473337803351, 2: 15.372903063400015}
_____
Afstand van bronindex 111 tot...
      Centrumindex 0:
              14 - 15.992481203007529 = -1.9924812030075287
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 4.114152863361451
      Euclidische afstand: 2.0283374628896076
      Centrumindex 1:
              14 - 54.156682027649765 = -40.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1612.6850219796552
      Euclidische afstand: 40.15824973750294
      Centrumindex 2:
              14 - 31.63235294117647 = -17.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 311.06144271434067
      Euclidische afstand: 17.636934050858745
  .-----
```

{0: 2.0283374628896076, 1: 40.15824973750294, 2: 17.636934050858745}

```
Afstand van bronindex 112 tot...
      Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 36.234453615240994
      Euclidische afstand: 6.0195060939616125
   _____
      Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1034.178109537259
      Euclidische afstand: 32.15863973393867
 ______
      Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 92.94379565551712
      Euclidische afstand: 9.640736261070371
{0: 6.0195060939616125, 1: 32.15863973393867, 2: 9.640736261070371}
  -----
Afstand van bronindex 113 tot...
       Centrumindex 0:
              20 - 15.992481203007529 = 4.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 16.204378427271106
      Euclidische afstand: 4.025466237253904
 ._____
       Centrumindex 1:
              20 - 54.156682027649765 = -34.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1166.804837647858
      Euclidische afstand: 34.158525109375816
      Centrumindex 2:
              20 - 31.63235294117647 = -11.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 135.473207420223
      Euclidische afstand: 11.639295830084524
 _____
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
```

\_\_\_\_\_

Afstand van bronindex 114 tot...

Centrumindex 0:

```
17 - 15.992481203007529 = 1.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1.1592656453162782
       Euclidische afstand: 1.0766919918510949
          _____
       Centrumindex 1:
              17 - 54.156682027649765 = -37.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1380.7449298137565
       Euclidische afstand: 37.158376307553546
 _____
       Centrumindex 2:
              17 - 31.63235294117647 = -14.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 214.26732506728183
       Euclidische afstand: 14.637872969365523
   _____
{0: 1.0766919918510949, 1: 37.158376307553546, 2: 14.637872969365523}
Afstand van bronindex 115 tot...
       Centrumindex 0:
              21 - 15.992481203007529 = 5.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 25.21941602125605
       Euclidische afstand: 5.021893668852025
       Centrumindex 1:
              21 - 54.156682027649765 = -33.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1099.4914735925583
       Euclidische afstand: 33.15858069327694
       Centrumindex 2:
              21 - 31.63235294117647 = -10.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 113.20850153787006
       Euclidische afstand: 10.639948380413792
{0: 5.021893668852025, 1: 33.15858069327694, 2: 10.639948380413792}
_____
Afstand van bronindex 116 tot...
       Centrumindex 0:
              70 - 15.992481203007529 = 54.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 2916.956258126518
```

Euclidische afstand: 54.0088535161275

```
Centrumindex 1:
              70 - 54.156682027649765 = 15.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 251.13663488288148
      Euclidische afstand: 15.84729108973775
      Centrumindex 2:
              70 - 31.63235294117647 = 38.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 1472.2379133025759
       Euclidische afstand: 38.36975258328591
  _____
{0: 54.0088535161275, 1: 15.84729108973775, 2: 38.36975258328591}
   -----
Afstand van bronindex 117 tot...
      Centrumindex 0:
              29 - 15.992481203007529 = 13.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 169.3397167731356
      Euclidische afstand: 13.013059470129829
 _____
      Centrumindex 1:
              29 - 54.156682027649765 = -25.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 632.9845611501622
      Euclidische afstand: 25.15918442935228
        -----
       Centrumindex 2:
              29 - 31.63235294117647 = -2.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 7.090854479046523
      Euclidische afstand: 2.662865839475681
{0: 13.013059470129829, 1: 25.15918442935228, 2: 2.662865839475681}
______
Afstand van bronindex 118 tot...
       Centrumindex 0:
              24 - 15.992481203007529 = 8.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 64.26452880321087
      Euclidische afstand: 8.016516001556466
 ._____
       Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
```

```
Totale euclidische som: 909.5513814266599
       Euclidische afstand: 30.158769560886597
      Centrumindex 2:
              24 - 31.63235294117647 = -7.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 58.41438389081123
      Euclidische afstand: 7.642930320944397
     _____
{0: 8.016516001556466, 1: 30.158769560886597, 2: 7.642930320944397}
_____
Afstand van bronindex 119 tot...
      Centrumindex 0:
              2 - 15.992481203007529 = -13.992481203007529
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 195.93370173554214
      Euclidische afstand: 13.997632004576422
      Centrumindex 1:
              2 - 54.156682027649765 = -52.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 2720.4453906432495
      Euclidische afstand: 52.1578890547082
 ._____
      Centrumindex 2:
              2 - 31.63235294117647 = -29.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 878.237913302576
       Euclidische afstand: 29.63507910066339
   _____
{0: 13.997632004576422, 1: 52.1578890547082, 2: 29.63507910066339}
_____
Afstand van bronindex 120 tot...
      Centrumindex 0:
              21 - 15.992481203007529 = 5.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 25.21941602125605
      Euclidische afstand: 5.021893668852025
      Centrumindex 1:
              21 - 54.156682027649765 = -33.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1099.4914735925583
      Euclidische afstand: 33.15858069327694
```

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Centrumindex 2:

```
21 - 31.63235294117647 = -10.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 113.20850153787006
      Euclidische afstand: 10.639948380413792
  _____
{0: 5.021893668852025, 1: 33.15858069327694, 2: 10.639948380413792}
  -----
Afstand van bronindex 121 tot...
      Centrumindex 0:
             70 - 15.992481203007529 = 54.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 2916.956258126518
      Euclidische afstand: 54.0088535161275
       -----
      Centrumindex 1:
             70 - 54.156682027649765 = 15.843317972350235
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 251.13663488288148
      Euclidische afstand: 15.84729108973775
          ._____
      Centrumindex 2:
             70 - 31.63235294117647 = 38.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 1472.2379133025759
      Euclidische afstand: 38.36975258328591
 _____
{0: 54.0088535161275, 1: 15.84729108973775, 2: 38.36975258328591}
_____
Afstand van bronindex 122 tot...
      Centrumindex 0:
             32 - 15.992481203007529 = 16.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 256.38482955509045
      Euclidische afstand: 16.01202140752661
      Centrumindex 1:
             32 - 54.156682027649765 = -22.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 491.0444689842637
      Euclidische afstand: 22.15952321202475
       .____
      Centrumindex 2:
             32 - 31.63235294117647 = 0.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 0.2967368319876966
```

Euclidische afstand: 0.5447355615229252

```
{0: 16.01202140752661, 1: 22.15952321202475, 2: 0.5447355615229252}
_____
Afstand van bronindex 123 tot...
      Centrumindex 0:
             32 - 15.992481203007529 = 16.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 256.6254310588498
      Euclidische afstand: 16.01953279777066
         _____
      Centrumindex 1:
             32 - 54.156682027649765 = -22.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 491.3347915649088
      Euclidische afstand: 22.166072984741994
 ______
      Centrumindex 2:
             32 - 31.63235294117647 = 0.367647058823529
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 0.49281526336024584
      Euclidische afstand: 0.7020080222905191
  _____
{0: 16.01953279777066, 1: 22.166072984741994, 2: 0.7020080222905191}
Afstand van bronindex 124 tot...
      Centrumindex 0:
             54 - 15.992481203007529 = 38.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1444.715656622759
      Euclidische afstand: 38.009415368073725
      Centrumindex 1:
             54 - 54.156682027649765 = -0.15668202764976513
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 0.15045976767397765
      Euclidische afstand: 0.38789143800034775
      Centrumindex 2:
             54 - 31.63235294117647 = 22.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 500.473207420223
      Euclidische afstand: 22.371258512212115
    -----
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
_____
```

```
Afstand van bronindex 125 tot...
       Centrumindex 0:
               12 - 15.992481203007529 = -3.9924812030075287
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 16.324679179150966
       Euclidische afstand: 4.040381068556648
       Centrumindex 1:
               12 - 54.156682027649765 = -42.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1777.6020726708996
       Euclidische afstand: 42.16161847783953
       Centrumindex 2:
               12 - 31.63235294117647 = -19.63235294117647
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 385.7869329104191
       Euclidische afstand: 19.641459541246398
{0: 4.040381068556648, 1: 42.16161847783953, 2: 19.641459541246398}
    _____
Afstand van bronindex 126 tot...
       Centrumindex 0:
               33 - 15.992481203007529 = 17.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 289.39986714907536
       Euclidische afstand: 17.011756733185297
        _____
       Centrumindex 1:
               33 - 54.156682027649765 = -21.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 447.73110492896416
       Euclidische afstand: 21.15965748609755
       Centrumindex 2:
               33 - 31.63235294117647 = 1.367647058823529
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.0320309496347546
       Euclidische afstand: 1.4254932303012717
{0: 17.011756733185297, 1: 21.15965748609755, 2: 1.4254932303012717}
______
Afstand van bronindex 127 tot...
       Centrumindex 0:
               24 - 15.992481203007529 = 8.007518796992471
```

1 - 0.3796992481203007 = 0.6203007518796992

```
Totale euclidische som: 64.50513030697027
       Euclidische afstand: 8.031508594714337
       Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 909.841704007305
       Euclidische afstand: 30.163582413355762
  -----
       Centrumindex 2:
              24 - 31.63235294117647 = -7.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 58.61046232218378
       Euclidische afstand: 7.655747012681635
  _____
{0: 8.031508594714337, 1: 30.163582413355762, 2: 7.655747012681635}
_____
Afstand van bronindex 128 tot...
      Centrumindex 0:
              33 - 15.992481203007529 = 17.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 289.6404686528347
       Euclidische afstand: 17.018826888268027
 ._____
       Centrumindex 1:
              33 - 54.156682027649765 = -21.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 448.0214275096093
       Euclidische afstand: 21.166516659800433
 ._____
       Centrumindex 2:
              33 - 31.63235294117647 = 1.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 2.228109381007304
       Euclidische afstand: 1.492685292018148
{0: 17.018826888268027, 1: 21.166516659800433, 2: 1.492685292018148}
Afstand van bronindex 129 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 841.5803182768947
       Euclidische afstand: 29.010003762097217
```

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Centrumindex 1:

```
45 - 54.156682027649765 = -9.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 83.97073626536975
      Euclidische afstand: 9.16355478323613
         -----
      Centrumindex 2:
             45 - 31.63235294117647 = 13.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 178.85556036139945
      Euclidische afstand: 13.373689108148113
 ______
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
______
Afstand van bronindex 130 tot...
      Centrumindex 0:
             33 - 15.992481203007529 = 17.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 289.39986714907536
      Euclidische afstand: 17.011756733185297
         ._____
      Centrumindex 1:
             33 - 54.156682027649765 = -21.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 447.73110492896416
      Euclidische afstand: 21.15965748609755
 _____
      Centrumindex 2:
             33 - 31.63235294117647 = 1.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 2.0320309496347546
      Euclidische afstand: 1.4254932303012717
 _____
{0: 17.011756733185297, 1: 21.15965748609755, 2: 1.4254932303012717}
  _____
Afstand van bronindex 131 tot...
      Centrumindex 0:
             20 - 15.992481203007529 = 4.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 16.204378427271106
      Euclidische afstand: 4.025466237253904
       _____
      Centrumindex 1:
             20 - 54.156682027649765 = -34.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1166.804837647858
```

Euclidische afstand: 34.158525109375816

```
Centrumindex 2:
              20 - 31.63235294117647 = -11.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 135.473207420223
       Euclidische afstand: 11.639295830084524
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
Afstand van bronindex 132 tot...
       Centrumindex 0:
              47 - 15.992481203007529 = 31.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 961.6103934648645
       Euclidische afstand: 31.00984349307272
       Centrumindex 1:
              47 - 54.156682027649765 = -7.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 51.34400815477069
       Euclidische afstand: 7.165473337803351
 _____
       Centrumindex 2:
              47 - 31.63235294117647 = 15.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 236.32614859669357
       Euclidische afstand: 15.372903063400015
{0: 31.00984349307272, 1: 7.165473337803351, 2: 15.372903063400015}
_____
Afstand van bronindex 133 tot...
       Centrumindex 0:
              29 - 15.992481203007529 = 13.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 169.58031827689499
       Euclidische afstand: 13.022300805805976
       Centrumindex 1:
              29 - 54.156682027649765 = -25.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 633.2748837308073
       Euclidische afstand: 25.164953481594345
 _____
       Centrumindex 2:
              29 - 31.63235294117647 = -2.632352941176471
```

1 - 0.4019607843137254 = 0.5980392156862746

```
Totale euclidische som: 7.286932910419072
       Euclidische afstand: 2.6994319606945223
{0: 13.022300805805976, 1: 25.164953481594345, 2: 2.6994319606945223}
-----
Afstand van bronindex 134 tot...
       Centrumindex 0:
              25 - 15.992481203007529 = 9.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 81.27956639719581
       Euclidische afstand: 9.01551808811872
       Centrumindex 1:
              25 - 54.156682027649765 = -29.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 850.2380173713603
       Euclidische afstand: 29.158841152750917
       Centrumindex 2:
              25 - 31.63235294117647 = -6.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 44.14967800845829
       Euclidische afstand: 6.644522406347825
  ._____
{0: 9.01551808811872, 1: 29.158841152750917, 2: 6.644522406347825}
_____
Afstand van bronindex 135 tot...
       Centrumindex 0:
              23 - 15.992481203007529 = 7.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 49.24949120922594
       Euclidische afstand: 7.017798173873764
       Centrumindex 1:
              23 - 54.156682027649765 = -31.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 970.8647454819594
       Euclidische afstand: 31.158702564162702
       Centrumindex 2:
              23 - 31.63235294117647 = -8.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 74.67908977316418
       Euclidische afstand: 8.641706415585071
  .....
```

{0: 7.017798173873764, 1: 31.158702564162702, 2: 8.641706415585071}

```
Afstand van bronindex 136 tot...
       Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 9.429942337045562
       Euclidische afstand: 3.0708211177217017
   _____
       Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1236.4085242838028
       Euclidische afstand: 35.16260121611885
       ______
       Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 159.93399173394852
       Euclidische afstand: 12.64650116569593
{0: 3.0708211177217017, 1: 35.16260121611885, 2: 12.64650116569593}
Afstand van bronindex 137 tot...
       Centrumindex 0:
              37 - 15.992481203007529 = 21.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 441.46001752501513
       Euclidische afstand: 21.01094994342272
       Centrumindex 1:
              37 - 54.156682027649765 = -17.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 294.47764870776604
       Euclidische afstand: 17.16035106598248
       Centrumindex 2:
              37 - 31.63235294117647 = 5.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 28.973207420222987
       Euclidische afstand: 5.382676603718915
 _____
```

{0: 21.01094994342272, 1: 17.16035106598248, 2: 5.382676603718915}

2

Afstand van bronindex 138 tot...

Centrumindex 0:

```
16 - 15.992481203007529 = 0.007518796992471266
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 0.14422805133133568
       Euclidische afstand: 0.3797736843586397
          -----
       Centrumindex 1:
              16 - 54.156682027649765 = -38.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1456.0582938690561
       Euclidische afstand: 38.15833190626991
          _____
       Centrumindex 2:
              16 - 31.63235294117647 = -15.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 244.53203094963476
       Euclidische afstand: 15.637519974396028
    _____
{0: 0.3797736843586397, 1: 38.15833190626991, 2: 15.637519974396028}
Afstand van bronindex 139 tot...
       Centrumindex 0:
              24 - 15.992481203007529 = 8.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 64.26452880321087
       Euclidische afstand: 8.016516001556466
       Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 909.5513814266599
       Euclidische afstand: 30.158769560886597
       Centrumindex 2:
              24 - 31.63235294117647 = -7.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 58.41438389081123
       Euclidische afstand: 7.642930320944397
{0: 8.016516001556466, 1: 30.158769560886597, 2: 7.642930320944397}
_____
Afstand van bronindex 140 tot...
       Centrumindex 0:
              33 - 15.992481203007529 = 17.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 289.39986714907536
```

Euclidische afstand: 17.011756733185297

```
Centrumindex 1:
              33 - 54.156682027649765 = -21.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 447.73110492896416
       Euclidische afstand: 21.15965748609755
       Centrumindex 2:
              33 - 31.63235294117647 = 1.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.0320309496347546
       Euclidische afstand: 1.4254932303012717
{0: 17.011756733185297, 1: 21.15965748609755, 2: 1.4254932303012717}
  -----
Afstand van bronindex 141 tot...
       Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 36.47505511900039
       Euclidische afstand: 6.039458180913283
 _____
       Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1034.4684321179043
       Euclidische afstand: 32.16315332982611
        -----
       Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 93.13987408688966
       Euclidische afstand: 9.650900169771194
{0: 6.039458180913283, 1: 32.16315332982611, 2: 9.650900169771194}
_____
Afstand van bronindex 142 tot...
       Centrumindex 0:
              24 - 15.992481203007529 = 8.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 64.50513030697027
       Euclidische afstand: 8.031508594714337
 _____
       Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
```

1 - 0.3548387096774193 = 0.6451612903225807

```
Totale euclidische som: 909.841704007305
       Euclidische afstand: 30.163582413355762
      Centrumindex 2:
              24 - 31.63235294117647 = -7.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 58.61046232218378
      Euclidische afstand: 7.655747012681635
     ._____
{0: 8.031508594714337, 1: 30.163582413355762, 2: 7.655747012681635}
_____
Afstand van bronindex 143 tot...
      Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 9.189340833286163
      Euclidische afstand: 3.031392556777522
      Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1236.1182017031574
      Euclidische afstand: 35.15847268729342
 ._____
       Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 159.73791330257595
       Euclidische afstand: 12.638746508359757
   _____
{0: 3.031392556777522, 1: 35.15847268729342, 2: 12.638746508359757}
_____
Afstand van bronindex 144 tot...
      Centrumindex 0:
              18 - 15.992481203007529 = 2.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 4.174303239301221
      Euclidische afstand: 2.0431111666527646
      Centrumindex 1:
              18 - 54.156682027649765 = -36.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1307.431565758457
      Euclidische afstand: 36.15842316471305
```

Centrumindex 2:

```
18 - 31.63235294117647 = -13.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 186.00261918492888
      Euclidische afstand: 13.638277720626196
  _____
{0: 2.0431111666527646, 1: 36.15842316471305, 2: 13.638277720626196}
  ._____
Afstand van bronindex 145 tot...
      Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 9.189340833286163
      Euclidische afstand: 3.031392556777522
       -----
      Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1236.1182017031574
      Euclidische afstand: 35.15847268729342
          ._____
       Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 159.73791330257595
      Euclidische afstand: 12.638746508359757
{0: 3.031392556777522, 1: 35.15847268729342, 2: 12.638746508359757}
_____
Afstand van bronindex 146 tot...
       Centrumindex 0:
              27 - 15.992481203007529 = 11.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 121.5502430889251
      Euclidische afstand: 11.02498267975624
      Centrumindex 1:
              27 - 54.156682027649765 = -27.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 737.9016118414064
      Euclidische afstand: 27.16434449496999
       ._____
      Centrumindex 2:
              27 - 31.63235294117647 = -4.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 21.816344675124956
```

Euclidische afstand: 4.67079700641389

```
{0: 11.02498267975624, 1: 27.16434449496999, 2: 4.67079700641389}
_____
Afstand van bronindex 147 tot...
       Centrumindex 0:
              9 - 15.992481203007529 = -6.992481203007529
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 49.03896489343674
       Euclidische afstand: 7.002782653591124
       Centrumindex 1:
              9 - 54.156682027649765 = -45.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 2039.2518422561527
       Euclidische afstand: 45.158076157606104
  _____
       Centrumindex 2:
              9 - 31.63235294117647 = -22.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 512.3849721261054
       Euclidische afstand: 22.635922162043794
   -----
{0: 7.002782653591124, 1: 45.158076157606104, 2: 22.635922162043794}
Afstand van bronindex 148 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 400.4449799310302
       Euclidische afstand: 20.011121406133896
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 329.79101276306557
       Euclidische afstand: 18.160149029208586
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 19.23791330257593
       Euclidische afstand: 4.386104570410506
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
```

```
Afstand van bronindex 149 tot...
       Centrumindex 0:
               42 - 15.992481203007529 = 26.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 676.5352054949398
       Euclidische afstand: 26.010290376982333
       Centrumindex 1:
               42 - 54.156682027649765 = -12.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 147.91082843126833
       Euclidische afstand: 12.161859579491466
       Centrumindex 2:
               42 - 31.63235294117647 = 10.367647058823529
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 107.64967800845828
       Euclidische afstand: 10.375436280391215
{0: 26.010290376982333, 1: 12.161859579491466, 2: 10.375436280391215}
    _____
Afstand van bronindex 150 tot...
       Centrumindex 0:
               51 - 15.992481203007529 = 35.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1225.6705438408044
       Euclidische afstand: 35.009577887212586
        _____
       Centrumindex 1:
               51 - 54.156682027649765 = -3.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 10.090551933572568
       Euclidische afstand: 3.1765629119494183
       Centrumindex 2:
               51 - 31.63235294117647 = 19.36764705882353
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 375.26732506728183
       Euclidische afstand: 19.371817804926874
{0: 35.009577887212586, 1: 3.1765629119494183, 2: 19.371817804926874}
______
Afstand van bronindex 151 tot...
       Centrumindex 0:
               22 - 15.992481203007529 = 6.007518796992471
```

1 - 0.3796992481203007 = 0.6203007518796992

```
Totale euclidische som: 36.47505511900039
      Euclidische afstand: 6.039458180913283
      Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1034.4684321179043
      Euclidische afstand: 32.16315332982611
  -----
      Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 93.13987408688966
      Euclidische afstand: 9.650900169771194
  _____
{0: 6.039458180913283, 1: 32.16315332982611, 2: 9.650900169771194}
_____
Afstand van bronindex 152 tot...
      Centrumindex 0:
              55 - 15.992481203007529 = 39.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1521.730694216744
      Euclidische afstand: 39.00936674975312
 ._____
       Centrumindex 1:
              55 - 54.156682027649765 = 0.8433179723502349
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 0.8370957123744474
      Euclidische afstand: 0.9149293482966033
 ._____
       Centrumindex 2:
              55 - 31.63235294117647 = 23.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 546.20850153787
      Euclidische afstand: 23.37110398628764
{0: 39.00936674975312, 1: 0.9149293482966033, 2: 23.37110398628764}
Afstand van bronindex 153 tot...
      Centrumindex 0:
              40 - 15.992481203007529 = 24.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 576.5051303069699
      Euclidische afstand: 24.01052124188415
```

Centrumindex 1:

```
40 - 54.156682027649765 = -14.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 200.5375565418674
       Euclidische afstand: 14.161128364006428
          ._____
       Centrumindex 2:
              40 - 31.63235294117647 = 8.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 70.17908977316416
       Euclidische afstand: 8.377296089620097
{0: 24.01052124188415, 1: 14.161128364006428, 2: 8.377296089620097}
______
Afstand van bronindex 154 tot...
       Centrumindex 0:
              20 - 15.992481203007529 = 4.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 16.204378427271106
      Euclidische afstand: 4.025466237253904
          ._____
       Centrumindex 1:
              20 - 54.156682027649765 = -34.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1166.804837647858
       Euclidische afstand: 34.158525109375816
       Centrumindex 2:
              20 - 31.63235294117647 = -11.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 135.473207420223
       Euclidische afstand: 11.639295830084524
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
   _____
Afstand van bronindex 155 tot...
       Centrumindex 0:
              51 - 15.992481203007529 = 35.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1225.6705438408044
      Euclidische afstand: 35.009577887212586
        _____
       Centrumindex 1:
              51 - 54.156682027649765 = -3.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 10.090551933572568
```

Euclidische afstand: 3.1765629119494183

```
Centrumindex 2:
              51 - 31.63235294117647 = 19.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 375.26732506728183
       Euclidische afstand: 19.371817804926874
{0: 35.009577887212586, 1: 3.1765629119494183, 2: 19.371817804926874}
Afstand van bronindex 156 tot...
       Centrumindex 0:
              16 - 15.992481203007529 = 0.007518796992471266
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 0.3848295550907342
       Euclidische afstand: 0.6203463186726703
       Centrumindex 1:
              16 - 54.156682027649765 = -38.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1456.3486164497015
       Euclidische afstand: 38.162135899995185
 _____
       Centrumindex 2:
              16 - 31.63235294117647 = -15.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 244.72810938100733
       Euclidische afstand: 15.643788204300368
{0: 0.6203463186726703, 1: 38.162135899995185, 2: 15.643788204300368}
_____
Afstand van bronindex 157 tot...
       Centrumindex 0:
              30 - 15.992481203007529 = 14.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 196.35475436712053
       Euclidische afstand: 14.012664071015209
       Centrumindex 1:
              30 - 54.156682027649765 = -24.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 583.6711970948627
       Euclidische afstand: 24.159288008856194
 _____
       Centrumindex 2:
              30 - 31.63235294117647 = -1.632352941176471
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 2.8261485966935807
       Euclidische afstand: 1.681115283582176
{0: 14.012664071015209, 1: 24.159288008856194, 2: 1.681115283582176}
-----
Afstand van bronindex 158 tot...
       Centrumindex 0:
              20 - 15.992481203007529 = 4.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 16.204378427271106
       Euclidische afstand: 4.025466237253904
       Centrumindex 1:
              20 - 54.156682027649765 = -34.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1166.804837647858
       Euclidische afstand: 34.158525109375816
       Centrumindex 2:
              20 - 31.63235294117647 = -11.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 135.473207420223
       Euclidische afstand: 11.639295830084524
  ._____
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
_____
Afstand van bronindex 159 tot...
       Centrumindex 0:
              20 - 15.992481203007529 = 4.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 16.204378427271106
      Euclidische afstand: 4.025466237253904
       Centrumindex 1:
              20 - 54.156682027649765 = -34.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1166.804837647858
       Euclidische afstand: 34.158525109375816
       Centrumindex 2:
              20 - 31.63235294117647 = -11.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 135.473207420223
       Euclidische afstand: 11.639295830084524
  ._____
```

{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}

```
Afstand van bronindex 160 tot...
      Centrumindex 0:
              44 - 15.992481203007529 = 28.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 784.5652806829097
      Euclidische afstand: 28.010092479013878
   _____
      Centrumindex 1:
              44 - 54.156682027649765 = -10.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 103.28410032066928
      Euclidische afstand: 10.1628785450122
       ______
      Centrumindex 2:
              44 - 31.63235294117647 = 12.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 153.12026624375238
      Euclidische afstand: 12.37417739664954
{0: 28.010092479013878, 1: 10.1628785450122, 2: 12.37417739664954}
Afstand van bronindex 161 tot...
       Centrumindex 0:
              40 - 15.992481203007529 = 24.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 576.7457318107294
      Euclidische afstand: 24.015531054105995
 _____
       Centrumindex 1:
              40 - 54.156682027649765 = -14.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 200.82787912251257
      Euclidische afstand: 14.171375343364263
      Centrumindex 2:
              40 - 31.63235294117647 = 8.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 70.3751682045367
      Euclidische afstand: 8.38899089310131
 _____
{0: 24.015531054105995, 1: 14.171375343364263, 2: 8.38899089310131}
_____
```

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Afstand van bronindex 162 tot...
Centrumindex 0:

```
26 - 15.992481203007529 = 10.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 100.29460399118075
       Euclidische afstand: 10.014719366571425
          ._____
       Centrumindex 1:
              26 - 54.156682027649765 = -28.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 792.9246533160608
       Euclidische afstand: 28.15891782927854
          _____
       Centrumindex 2:
              26 - 31.63235294117647 = -5.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 31.88497212610535
       Euclidische afstand: 5.646677972587542
   _____
{0: 10.014719366571425, 1: 28.15891782927854, 2: 5.646677972587542}
2
Afstand van bronindex 163 tot...
       Centrumindex 0:
              17 - 15.992481203007529 = 1.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1.1592656453162782
       Euclidische afstand: 1.0766919918510949
 _____
       Centrumindex 1:
              17 - 54.156682027649765 = -37.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1380.7449298137565
       Euclidische afstand: 37.158376307553546
       Centrumindex 2:
              17 - 31.63235294117647 = -14.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 214.26732506728183
       Euclidische afstand: 14.637872969365523
{0: 1.0766919918510949, 1: 37.158376307553546, 2: 14.637872969365523}
_____
Afstand van bronindex 164 tot...
       Centrumindex 0:
              1 - 15.992481203007529 = -14.992481203007529
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 224.9186641415572
```

Euclidische afstand: 14.99728855965495

```
Centrumindex 1:
              1 - 54.156682027649765 = -53.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 2825.758754698549
       Euclidische afstand: 53.15786634825131
       Centrumindex 2:
              1 - 31.63235294117647 = -30.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 938.5026191849289
       Euclidische afstand: 30.634990112368715
{0: 14.99728855965495, 1: 53.15786634825131, 2: 30.634990112368715}
   -----
Afstand van bronindex 165 tot...
       Centrumindex 0:
              9 - 15.992481203007529 = -6.992481203007529
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 49.279566397196135
       Euclidische afstand: 7.019940626329836
 ______
       Centrumindex 1:
              9 - 54.156682027649765 = -45.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 2039.542164836798
       Euclidische afstand: 45.16129055769773
        _____
       Centrumindex 2:
              9 - 31.63235294117647 = -22.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 512.581050557478
       Euclidische afstand: 22.64025288192422
{0: 7.019940626329836, 1: 45.16129055769773, 2: 22.64025288192422}
_____
Afstand van bronindex 166 tot...
       Centrumindex 0:
              20 - 15.992481203007529 = 4.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 16.444979931030506
       Euclidische afstand: 4.05524104475067
 ._____
       Centrumindex 1:
              20 - 54.156682027649765 = -34.156682027649765
```

1 - 0.3548387096774193 = 0.6451612903225807

```
Totale euclidische som: 1167.0951602285033
       Euclidische afstand: 34.162774480836646
       Centrumindex 2:
              20 - 31.63235294117647 = -11.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 135.66928585159556
       Euclidische afstand: 11.64771590706073
     -----
{0: 4.05524104475067, 1: 34.162774480836646, 2: 11.64771590706073}
_____
Afstand van bronindex 167 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 841.5803182768947
       Euclidische afstand: 29.010003762097217
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 83.97073626536975
       Euclidische afstand: 9.16355478323613
 ._____
       Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 178.85556036139945
       Euclidische afstand: 13.373689108148113
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
_____
Afstand van bronindex 168 tot...
       Centrumindex 0:
              20 - 15.992481203007529 = 4.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 16.204378427271106
       Euclidische afstand: 4.025466237253904
       Centrumindex 1:
              20 - 54.156682027649765 = -34.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1166.804837647858
       Euclidische afstand: 34.158525109375816
```

Centrumindex 2:

```
20 - 31.63235294117647 = -11.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 135.473207420223
       Euclidische afstand: 11.639295830084524
  _____
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
-----
Afstand van bronindex 169 tot...
       Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 144.32467917915065
       Euclidische afstand: 12.013520682096097
       -----
       Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 684.2979252054618
      Euclidische afstand: 26.1590887686376
       Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 13.355560361399464
       Euclidische afstand: 3.6545260104970474
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
_____
Afstand van bronindex 170 tot...
       Centrumindex 0:
              61 - 15.992481203007529 = 45.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 2025.8209197806536
      Euclidische afstand: 45.009120406653736
       Centrumindex 1:
              61 - 54.156682027649765 = 6.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 46.95691138057727
      Euclidische afstand: 6.852511319259332
       .____
       Centrumindex 2:
              61 - 31.63235294117647 = 29.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 862.6202662437523
```

Euclidische afstand: 29.37039778831319

```
\{0: 45.009120406653736, 1: 6.852511319259332, 2: 29.37039778831319\}
_____
Afstand van bronindex 171 tot...
      Centrumindex 0:
             4 - 15.992481203007529 = -11.992481203007529
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 143.96377692351203
      Euclidische afstand: 11.998490610218939
          ._____
      Centrumindex 1:
             4 - 54.156682027649765 = -50.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 2515.8186625326507
      Euclidische afstand: 50.15793718378628
 _____
      Centrumindex 2:
             4 - 31.63235294117647 = -27.63235294117647
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 763.70850153787
      Euclidische afstand: 27.63527639698706
  _____
{0: 11.998490610218939, 1: 50.15793718378628, 2: 27.63527639698706}
Afstand van bronindex 172 tot...
      Centrumindex 0:
             1 - 15.992481203007529 = -14.992481203007529
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 225.1592656453166
      Euclidische afstand: 15.00530791571158
      Centrumindex 1:
             1 - 54.156682027649765 = -53.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 2826.049077279194
      Euclidische afstand: 53.16059703651939
      Centrumindex 2:
             1 - 31.63235294117647 = -30.63235294117647
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 938.6986976163015
      Euclidische afstand: 30.63819018180254
   _____
{0: 15.00530791571158, 1: 53.16059703651939, 2: 30.63819018180254}
```

```
Afstand van bronindex 173 tot...
       Centrumindex 0:
               21 - 15.992481203007529 = 5.007518796992471
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 25.21941602125605
       Euclidische afstand: 5.021893668852025
       Centrumindex 1:
               21 - 54.156682027649765 = -33.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1099.4914735925583
       Euclidische afstand: 33.15858069327694
       Centrumindex 2:
               21 - 31.63235294117647 = -10.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 113.20850153787006
       Euclidische afstand: 10.639948380413792
{0: 5.021893668852025, 1: 33.15858069327694, 2: 10.639948380413792}
    ______
Afstand van bronindex 174 tot...
       Centrumindex 0:
               56 - 15.992481203007529 = 40.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1600.745731810729
       Euclidische afstand: 40.00932056172323
        _____
       Centrumindex 1:
               56 - 54.156682027649765 = 1.8433179723502349
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 3.523731657074917
       Euclidische afstand: 1.8771605304488257
       Centrumindex 2:
               56 - 31.63235294117647 = 24.36764705882353
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 593.9437956555171
       Euclidische afstand: 24.3709621405376
{0: 40.00932056172323, 1: 1.8771605304488257, 2: 24.3709621405376}
______
Afstand van bronindex 175 tot...
       Centrumindex 0:
               18 - 15.992481203007529 = 2.0075187969924713
```

0 - 0.3796992481203007 = -0.3796992481203007

```
Totale euclidische som: 4.174303239301221
       Euclidische afstand: 2.0431111666527646
       Centrumindex 1:
              18 - 54.156682027649765 = -36.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1307.431565758457
       Euclidische afstand: 36.15842316471305
   _____
       Centrumindex 2:
              18 - 31.63235294117647 = -13.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 186.00261918492888
       Euclidische afstand: 13.638277720626196
  ______
{0: 2.0431111666527646, 1: 36.15842316471305, 2: 13.638277720626196}
_____
Afstand van bronindex 176 tot...
      Centrumindex 0:
              20 - 15.992481203007529 = 4.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 16.204378427271106
       Euclidische afstand: 4.025466237253904
 ._____
       Centrumindex 1:
              20 - 54.156682027649765 = -34.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1166.804837647858
       Euclidische afstand: 34.158525109375816
 ._____
       Centrumindex 2:
              20 - 31.63235294117647 = -11.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 135.473207420223
       Euclidische afstand: 11.639295830084524
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
Afstand van bronindex 177 tot...
       Centrumindex 0:
              50 - 15.992481203007529 = 34.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1156.6555062468194
       Euclidische afstand: 34.009638431580235
```

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Centrumindex 1:

```
50 - 54.156682027649765 = -4.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 17.4039159888721
      Euclidische afstand: 4.171800089754074
         -----
      Centrumindex 2:
             50 - 31.63235294117647 = 18.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 337.53203094963476
      Euclidische afstand: 18.372044822219294
 _____
{0: 34.009638431580235, 1: 4.171800089754074, 2: 18.372044822219294}
______
Afstand van bronindex 178 tot...
      Centrumindex 0:
             30 - 15.992481203007529 = 14.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 196.35475436712053
      Euclidische afstand: 14.012664071015209
         ._____
      Centrumindex 1:
             30 - 54.156682027649765 = -24.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 583.6711970948627
      Euclidische afstand: 24.159288008856194
_____
      Centrumindex 2:
             30 - 31.63235294117647 = -1.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 2.8261485966935807
      Euclidische afstand: 1.681115283582176
 _____
{0: 14.012664071015209, 1: 24.159288008856194, 2: 1.681115283582176}
  _____
Afstand van bronindex 179 tot...
      Centrumindex 0:
             36 - 15.992481203007529 = 20.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 400.4449799310302
      Euclidische afstand: 20.011121406133896
       _____
      Centrumindex 1:
             36 - 54.156682027649765 = -18.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 329.79101276306557
```

Euclidische afstand: 18.160149029208586

```
Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 19.23791330257593
       Euclidische afstand: 4.386104570410506
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
Afstand van bronindex 180 tot...
       Centrumindex 0:
              20 - 15.992481203007529 = 4.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 16.204378427271106
       Euclidische afstand: 4.025466237253904
       Centrumindex 1:
              20 - 54.156682027649765 = -34.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1166.804837647858
       Euclidische afstand: 34.158525109375816
 _____
       Centrumindex 2:
              20 - 31.63235294117647 = -11.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 135.473207420223
       Euclidische afstand: 11.639295830084524
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
_____
Afstand van bronindex 181 tot...
       Centrumindex 0:
              20 - 15.992481203007529 = 4.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 16.204378427271106
       Euclidische afstand: 4.025466237253904
       Centrumindex 1:
              20 - 54.156682027649765 = -34.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1166.804837647858
       Euclidische afstand: 34.158525109375816
 _____
       Centrumindex 2:
              20 - 31.63235294117647 = -11.632352941176471
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 135.473207420223
      Euclidische afstand: 11.639295830084524
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
_____
Afstand van bronindex 182 tot...
      Centrumindex 0:
              9 - 15.992481203007529 = -6.992481203007529
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 49.03896489343674
      Euclidische afstand: 7.002782653591124
 _____
      Centrumindex 1:
              9 - 54.156682027649765 = -45.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 2039.2518422561527
      Euclidische afstand: 45.158076157606104
      Centrumindex 2:
              9 - 31.63235294117647 = -22.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 512.3849721261054
      Euclidische afstand: 22.635922162043794
   _____
{0: 7.002782653591124, 1: 45.158076157606104, 2: 22.635922162043794}
_____
Afstand van bronindex 183 tot...
      Centrumindex 0:
              1 - 15.992481203007529 = -14.992481203007529
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 225.1592656453166
      Euclidische afstand: 15.00530791571158
      Centrumindex 1:
              1 - 54.156682027649765 = -53.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 2826.049077279194
      Euclidische afstand: 53.16059703651939
      Centrumindex 2:
              1 - 31.63235294117647 = -30.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 938.6986976163015
      Euclidische afstand: 30.63819018180254
  ._____
```

{0: 15.00530791571158, 1: 53.16059703651939, 2: 30.63819018180254}

```
Afstand van bronindex 184 tot...
       Centrumindex 0:
              4 - 15.992481203007529 = -11.992481203007529
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 144.20437842727142
       Euclidische afstand: 12.008512748349457
   -----
       Centrumindex 1:
              4 - 54.156682027649765 = -50.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 2516.1089851132956
       Euclidische afstand: 50.160831184434095
  _____
       Centrumindex 2:
              4 - 31.63235294117647 = -27.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 763.9045799692426
       Euclidische afstand: 27.63882378049476
{0: 12.008512748349457, 1: 50.160831184434095, 2: 27.63882378049476}
Afstand van bronindex 185 tot...
       Centrumindex 0:
              20 - 15.992481203007529 = 4.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 16.204378427271106
       Euclidische afstand: 4.025466237253904
       Centrumindex 1:
              20 - 54.156682027649765 = -34.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1166.804837647858
       Euclidische afstand: 34.158525109375816
       Centrumindex 2:
              20 - 31.63235294117647 = -11.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 135.473207420223
       Euclidische afstand: 11.639295830084524
  _____
```

Afstand van bronindex 186 tot...

Centrumindex 0:

{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}

```
20 - 15.992481203007529 = 4.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 16.444979931030506
       Euclidische afstand: 4.05524104475067
          -----
       Centrumindex 1:
              20 - 54.156682027649765 = -34.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1167.0951602285033
       Euclidische afstand: 34.162774480836646
 _____
       Centrumindex 2:
              20 - 31.63235294117647 = -11.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 135.66928585159556
       Euclidische afstand: 11.64771590706073
   _____
{0: 4.05524104475067, 1: 34.162774480836646, 2: 11.64771590706073}
Afstand van bronindex 187 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 841.8209197806541
       Euclidische afstand: 29.0141503370451
 _____
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 84.2610588460149
       Euclidische afstand: 9.179382269304122
       Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 179.05163879277202
       Euclidische afstand: 13.381017853391125
{0: 29.0141503370451, 1: 9.179382269304122, 2: 13.381017853391125}
_____
Afstand van bronindex 188 tot...
       Centrumindex 0:
              40 - 15.992481203007529 = 24.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 576.5051303069699
```

Euclidische afstand: 24.01052124188415

```
Centrumindex 1:
              40 - 54.156682027649765 = -14.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 200.5375565418674
       Euclidische afstand: 14.161128364006428
       Centrumindex 2:
              40 - 31.63235294117647 = 8.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 70.17908977316416
       Euclidische afstand: 8.377296089620097
{0: 24.01052124188415, 1: 14.161128364006428, 2: 8.377296089620097}
  _____
Afstand van bronindex 189 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 400.4449799310302
       Euclidische afstand: 20.011121406133896
 ______
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 329.79101276306557
       Euclidische afstand: 18.160149029208586
        -----
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 19.23791330257593
       Euclidische afstand: 4.386104570410506
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
_____
Afstand van bronindex 190 tot...
       Centrumindex 0:
              32 - 15.992481203007529 = 16.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 256.6254310588498
       Euclidische afstand: 16.01953279777066
 ._____
       Centrumindex 1:
              32 - 54.156682027649765 = -22.156682027649765
```

1 - 0.3548387096774193 = 0.6451612903225807

```
Totale euclidische som: 491.3347915649088
      Euclidische afstand: 22.166072984741994
      Centrumindex 2:
              32 - 31.63235294117647 = 0.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 0.49281526336024584
      Euclidische afstand: 0.7020080222905191
     -----
{0: 16.01953279777066, 1: 22.166072984741994, 2: 0.7020080222905191}
_____
Afstand van bronindex 191 tot...
      Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 9.189340833286163
      Euclidische afstand: 3.031392556777522
      Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1236.1182017031574
      Euclidische afstand: 35.15847268729342
 ._____
       Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 159.73791330257595
       Euclidische afstand: 12.638746508359757
   -----
{0: 3.031392556777522, 1: 35.15847268729342, 2: 12.638746508359757}
_____
Afstand van bronindex 192 tot...
      Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 9.429942337045562
      Euclidische afstand: 3.0708211177217017
      Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1236.4085242838028
      Euclidische afstand: 35.16260121611885
```

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Centrumindex 2:

```
19 - 31.63235294117647 = -12.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 159.93399173394852
      Euclidische afstand: 12.64650116569593
  _____
{0: 3.0708211177217017, 1: 35.16260121611885, 2: 12.64650116569593}
  -----
Afstand van bronindex 193 tot...
      Centrumindex 0:
              3 - 15.992481203007529 = -12.992481203007529
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 169.18934083328648
      Euclidische afstand: 13.007280301173127
       -----
      Centrumindex 1:
              3 - 54.156682027649765 = -51.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 2617.4223491685952
      Euclidische afstand: 51.16075008410838
       Centrumindex 2:
              3 - 31.63235294117647 = -28.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 820.1692858515955
      Euclidische afstand: 28.638597833196993
 ______
{0: 13.007280301173127, 1: 51.16075008410838, 2: 28.638597833196993}
_____
Afstand van bronindex 194 tot...
      Centrumindex 0:
              44 - 15.992481203007529 = 28.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 784.8058821866691
      Euclidische afstand: 28.014387057129575
      Centrumindex 1:
              44 - 54.156682027649765 = -10.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 103.57442290131443
      Euclidische afstand: 10.177152003449415
       .____
      Centrumindex 2:
              44 - 31.63235294117647 = 12.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 153.31634467512495
```

Euclidische afstand: 12.382097749376918

```
{0: 28.014387057129575, 1: 10.177152003449415, 2: 12.382097749376918}
_____
Afstand van bronindex 195 tot...
      Centrumindex 0:
             58 - 15.992481203007529 = 42.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1765.0164085024585
      Euclidische afstand: 42.012098358716365
         _____
      Centrumindex 1:
             58 - 54.156682027649765 = 3.843317972350235
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 15.187326127121018
      Euclidische afstand: 3.8970920090653514
  _____
      Centrumindex 2:
             58 - 31.63235294117647 = 26.36764705882353
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 695.6104623221838
      Euclidische afstand: 26.374428189482778
  ._____
{0: 42.012098358716365, 1: 3.8970920090653514, 2: 26.374428189482778}
_____
Afstand van bronindex 196 tot...
      Centrumindex 0:
             20 - 15.992481203007529 = 4.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 16.204378427271106
      Euclidische afstand: 4.025466237253904
      Centrumindex 1:
             20 - 54.156682027649765 = -34.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1166.804837647858
      Euclidische afstand: 34.158525109375816
      Centrumindex 2:
             20 - 31.63235294117647 = -11.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 135.473207420223
      Euclidische afstand: 11.639295830084524
    _____
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
```

\_\_\_\_\_

```
Afstand van bronindex 197 tot...
       Centrumindex 0:
               42 - 15.992481203007529 = 26.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 676.5352054949398
       Euclidische afstand: 26.010290376982333
       Centrumindex 1:
               42 - 54.156682027649765 = -12.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 147.91082843126833
       Euclidische afstand: 12.161859579491466
       Centrumindex 2:
               42 - 31.63235294117647 = 10.367647058823529
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 107.64967800845828
       Euclidische afstand: 10.375436280391215
{0: 26.010290376982333, 1: 12.161859579491466, 2: 10.375436280391215}
    _____
Afstand van bronindex 198 tot...
       Centrumindex 0:
               20 - 15.992481203007529 = 4.007518796992471
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 16.444979931030506
       Euclidische afstand: 4.05524104475067
        _____
       Centrumindex 1:
               20 - 54.156682027649765 = -34.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1167.0951602285033
       Euclidische afstand: 34.162774480836646
       Centrumindex 2:
               20 - 31.63235294117647 = -11.632352941176471
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 135.66928585159556
       Euclidische afstand: 11.64771590706073
{0: 4.05524104475067, 1: 34.162774480836646, 2: 11.64771590706073}
______
Afstand van bronindex 199 tot...
       Centrumindex 0:
               24 - 15.992481203007529 = 8.007518796992471
```

0 - 0.3796992481203007 = -0.3796992481203007

```
Totale euclidische som: 64.26452880321087
      Euclidische afstand: 8.016516001556466
      Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 909.5513814266599
      Euclidische afstand: 30.158769560886597
   _____
      Centrumindex 2:
              24 - 31.63235294117647 = -7.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 58.41438389081123
      Euclidische afstand: 7.642930320944397
  _____
{0: 8.016516001556466, 1: 30.158769560886597, 2: 7.642930320944397}
_____
Afstand van bronindex 200 tot...
      Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 144.32467917915065
      Euclidische afstand: 12.013520682096097
 ._____
       Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 684.2979252054618
      Euclidische afstand: 26.1590887686376
 ._____
       Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 13.355560361399464
      Euclidische afstand: 3.6545260104970474
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
Afstand van bronindex 201 tot...
      Centrumindex 0:
              20 - 15.992481203007529 = 4.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 16.204378427271106
      Euclidische afstand: 4.025466237253904
```

Centrumindex 1:

```
20 - 54.156682027649765 = -34.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1166.804837647858
      Euclidische afstand: 34.158525109375816
         -----
      Centrumindex 2:
             20 - 31.63235294117647 = -11.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 135.473207420223
      Euclidische afstand: 11.639295830084524
  ______
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
______
Afstand van bronindex 202 tot...
      Centrumindex 0:
             34 - 15.992481203007529 = 18.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 324.41490474306033
      Euclidische afstand: 18.011521444427185
         ._____
      Centrumindex 1:
             34 - 54.156682027649765 = -20.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 406.4177408736646
      Euclidische afstand: 20.159805080249775
 _____
      Centrumindex 2:
             34 - 31.63235294117647 = 2.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 5.767325067281813
      Euclidische afstand: 2.401525570815729
  _____
{0: 18.011521444427185, 1: 20.159805080249775, 2: 2.401525570815729}
  -----
Afstand van bronindex 203 tot...
      Centrumindex 0:
             45 - 15.992481203007529 = 29.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 841.5803182768947
      Euclidische afstand: 29.010003762097217
       ._____
      Centrumindex 1:
             45 - 54.156682027649765 = -9.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 83.97073626536975
```

Euclidische afstand: 9.16355478323613

```
Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 178.85556036139945
       Euclidische afstand: 13.373689108148113
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
Afstand van bronindex 204 tot...
       Centrumindex 0:
              18 - 15.992481203007529 = 2.0075187969924713
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 4.414904743060619
       Euclidische afstand: 2.1011674714454864
       Centrumindex 1:
              18 - 54.156682027649765 = -36.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1307.7218883391024
       Euclidische afstand: 36.16243753315175
 _____
       Centrumindex 2:
              18 - 31.63235294117647 = -13.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 186.19869761630144
       Euclidische afstand: 13.645464360596215
{0: 2.1011674714454864, 1: 36.16243753315175, 2: 13.645464360596215}
_____
Afstand van bronindex 205 tot...
       Centrumindex 0:
              2 - 15.992481203007529 = -13.992481203007529
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 195.93370173554214
       Euclidische afstand: 13.997632004576422
       Centrumindex 1:
              2 - 54.156682027649765 = -52.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 2720.4453906432495
       Euclidische afstand: 52.1578890547082
 _____
       Centrumindex 2:
              2 - 31.63235294117647 = -29.63235294117647
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 878.237913302576
      Euclidische afstand: 29.63507910066339
{0: 13.997632004576422, 1: 52.1578890547082, 2: 29.63507910066339}
_____
Afstand van bronindex 206 tot...
       Centrumindex 0:
              32 - 15.992481203007529 = 16.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 256.38482955509045
      Euclidische afstand: 16.01202140752661
 _____
       Centrumindex 1:
              32 - 54.156682027649765 = -22.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 491.0444689842637
      Euclidische afstand: 22.15952321202475
      Centrumindex 2:
              32 - 31.63235294117647 = 0.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 0.2967368319876966
      Euclidische afstand: 0.5447355615229252
  ._____
{0: 16.01202140752661, 1: 22.15952321202475, 2: 0.5447355615229252}
_____
Afstand van bronindex 207 tot...
      Centrumindex 0:
              26 - 15.992481203007529 = 10.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 100.53520549494016
      Euclidische afstand: 10.026724564629276
      Centrumindex 1:
              26 - 54.156682027649765 = -28.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 793.2149758967059
      Euclidische afstand: 28.164072430966122
      Centrumindex 2:
              26 - 31.63235294117647 = -5.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 32.081050557477894
      Euclidische afstand: 5.66401364382872
  .....
```

{0: 10.026724564629276, 1: 28.164072430966122, 2: 5.66401364382872}

```
Afstand van bronindex 208 tot...
       Centrumindex 0:
              16 - 15.992481203007529 = 0.007518796992471266
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 0.3848295550907342
       Euclidische afstand: 0.6203463186726703
   -----
       Centrumindex 1:
              16 - 54.156682027649765 = -38.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1456.3486164497015
       Euclidische afstand: 38.162135899995185
       ______
       Centrumindex 2:
              16 - 31.63235294117647 = -15.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 244.72810938100733
       Euclidische afstand: 15.643788204300368
{0: 0.6203463186726703, 1: 38.162135899995185, 2: 15.643788204300368}
Afstand van bronindex 209 tot...
       Centrumindex 0:
              40 - 15.992481203007529 = 24.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 576.7457318107294
       Euclidische afstand: 24.015531054105995
 ______
       Centrumindex 1:
              40 - 54.156682027649765 = -14.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 200.82787912251257
       Euclidische afstand: 14.171375343364263
       Centrumindex 2:
              40 - 31.63235294117647 = 8.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 70.3751682045367
       Euclidische afstand: 8.38899089310131
 _____
{0: 24.015531054105995, 1: 14.171375343364263, 2: 8.38899089310131}
_____
Afstand van bronindex 210 tot...
      Centrumindex 0:
```

```
24 - 15.992481203007529 = 8.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 64.26452880321087
       Euclidische afstand: 8.016516001556466
          -----
       Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 909.5513814266599
       Euclidische afstand: 30.158769560886597
 _____
       Centrumindex 2:
              24 - 31.63235294117647 = -7.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 58.41438389081123
       Euclidische afstand: 7.642930320944397
   _____
{0: 8.016516001556466, 1: 30.158769560886597, 2: 7.642930320944397}
2
Afstand van bronindex 211 tot...
       Centrumindex 0:
              35 - 15.992481203007529 = 19.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 361.6705438408046
       Euclidische afstand: 19.017637704005317
       Centrumindex 1:
              35 - 54.156682027649765 = -19.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 367.3946993990102
       Euclidische afstand: 19.16754286284526
       Centrumindex 2:
              35 - 31.63235294117647 = 3.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 11.69869761630142
       Euclidische afstand: 3.420335892321311
{0: 19.017637704005317, 1: 19.16754286284526, 2: 3.420335892321311}
_____
Afstand van bronindex 212 tot...
       Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 36.234453615240994
```

Euclidische afstand: 6.0195060939616125

```
Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1034.178109537259
       Euclidische afstand: 32.15863973393867
       Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 92.94379565551712
       Euclidische afstand: 9.640736261070371
{0: 6.0195060939616125, 1: 32.15863973393867, 2: 9.640736261070371}
   _____
Afstand van bronindex 213 tot...
       Centrumindex 0:
              30 - 15.992481203007529 = 14.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 196.35475436712053
       Euclidische afstand: 14.012664071015209
 _____
       Centrumindex 1:
              30 - 54.156682027649765 = -24.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 583.6711970948627
       Euclidische afstand: 24.159288008856194
        ______
       Centrumindex 2:
              30 - 31.63235294117647 = -1.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.8261485966935807
       Euclidische afstand: 1.681115283582176
{0: 14.012664071015209, 1: 24.159288008856194, 2: 1.681115283582176}
_____
Afstand van bronindex 214 tot...
       Centrumindex 0:
              40 - 15.992481203007529 = 24.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 576.5051303069699
       Euclidische afstand: 24.01052124188415
 _____
       Centrumindex 1:
              40 - 54.156682027649765 = -14.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
```

```
Totale euclidische som: 200.5375565418674
       Euclidische afstand: 14.161128364006428
      Centrumindex 2:
              40 - 31.63235294117647 = 8.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 70.17908977316416
      Euclidische afstand: 8.377296089620097
     -----
{0: 24.01052124188415, 1: 14.161128364006428, 2: 8.377296089620097}
_____
Afstand van bronindex 215 tot...
      Centrumindex 0:
              31 - 15.992481203007529 = 15.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 225.61039346486487
      Euclidische afstand: 15.020332668248892
      Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 536.6481556202083
      Euclidische afstand: 23.165667605752446
 ._____
       Centrumindex 2:
              31 - 31.63235294117647 = -0.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 0.7575211457131878
       Euclidische afstand: 0.8703569070865055
   _____
{0: 15.020332668248892, 1: 23.165667605752446, 2: 0.8703569070865055}
_____
Afstand van bronindex 216 tot...
      Centrumindex 0:
              27 - 15.992481203007529 = 11.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 121.5502430889251
      Euclidische afstand: 11.02498267975624
      Centrumindex 1:
              27 - 54.156682027649765 = -27.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 737.9016118414064
      Euclidische afstand: 27.16434449496999
```

Centrumindex 2:

```
27 - 31.63235294117647 = -4.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 21.816344675124956
      Euclidische afstand: 4.67079700641389
 _____
{0: 11.02498267975624, 1: 27.16434449496999, 2: 4.67079700641389}
-------
Afstand van bronindex 217 tot...
      Centrumindex 0:
              42 - 15.992481203007529 = 26.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 676.5352054949398
      Euclidische afstand: 26.010290376982333
       -----
      Centrumindex 1:
              42 - 54.156682027649765 = -12.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 147.91082843126833
      Euclidische afstand: 12.161859579491466
       Centrumindex 2:
              42 - 31.63235294117647 = 10.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 107.64967800845828
      Euclidische afstand: 10.375436280391215
 _____
{0: 26.010290376982333, 1: 12.161859579491466, 2: 10.375436280391215}
_____
Afstand van bronindex 218 tot...
      Centrumindex 0:
              32 - 15.992481203007529 = 16.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 256.6254310588498
      Euclidische afstand: 16.01953279777066
      Centrumindex 1:
              32 - 54.156682027649765 = -22.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 491.3347915649088
      Euclidische afstand: 22.166072984741994
       .____
      Centrumindex 2:
              32 - 31.63235294117647 = 0.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 0.49281526336024584
```

Euclidische afstand: 0.7020080222905191

```
{0: 16.01953279777066, 1: 22.166072984741994, 2: 0.7020080222905191}
_____
Afstand van bronindex 219 tot...
      Centrumindex 0:
             30 - 15.992481203007529 = 14.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 196.35475436712053
      Euclidische afstand: 14.012664071015209
          -----
      Centrumindex 1:
             30 - 54.156682027649765 = -24.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 583.6711970948627
      Euclidische afstand: 24.159288008856194
  _____
      Centrumindex 2:
             30 - 31.63235294117647 = -1.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 2.8261485966935807
      Euclidische afstand: 1.681115283582176
  _____
{0: 14.012664071015209, 1: 24.159288008856194, 2: 1.681115283582176}
Afstand van bronindex 220 tot...
      Centrumindex 0:
             16 - 15.992481203007529 = 0.007518796992471266
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 0.3848295550907342
      Euclidische afstand: 0.6203463186726703
      Centrumindex 1:
             16 - 54.156682027649765 = -38.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1456.3486164497015
      Euclidische afstand: 38.162135899995185
      Centrumindex 2:
             16 - 31.63235294117647 = -15.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 244.72810938100733
      Euclidische afstand: 15.643788204300368
    -----
{0: 0.6203463186726703, 1: 38.162135899995185, 2: 15.643788204300368}
```

-----

```
Afstand van bronindex 221 tot...
       Centrumindex 0:
               27 - 15.992481203007529 = 11.007518796992471
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 121.30964158516569
       Euclidische afstand: 11.014065624698524
       Centrumindex 1:
               27 - 54.156682027649765 = -27.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 737.6112892607613
       Euclidische afstand: 27.159000152081468
       Centrumindex 2:
               27 - 31.63235294117647 = -4.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 21.620266243752408
       Euclidische afstand: 4.649759804952553
{0: 11.014065624698524, 1: 27.159000152081468, 2: 4.649759804952553}
    _____
Afstand van bronindex 222 tot...
       Centrumindex 0:
               51 - 15.992481203007529 = 35.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1225.6705438408044
       Euclidische afstand: 35.009577887212586
        _____
       Centrumindex 1:
               51 - 54.156682027649765 = -3.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 10.090551933572568
       Euclidische afstand: 3.1765629119494183
       Centrumindex 2:
               51 - 31.63235294117647 = 19.36764705882353
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 375.26732506728183
       Euclidische afstand: 19.371817804926874
{0: 35.009577887212586, 1: 3.1765629119494183, 2: 19.371817804926874}
______
Afstand van bronindex 223 tot...
       Centrumindex 0:
               40 - 15.992481203007529 = 24.00751879699247
```

0 - 0.3796992481203007 = -0.3796992481203007

```
Totale euclidische som: 576.5051303069699
       Euclidische afstand: 24.01052124188415
       Centrumindex 1:
              40 - 54.156682027649765 = -14.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 200.5375565418674
       Euclidische afstand: 14.161128364006428
       Centrumindex 2:
              40 - 31.63235294117647 = 8.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 70.17908977316416
       Euclidische afstand: 8.377296089620097
  ______
{0: 24.01052124188415, 1: 14.161128364006428, 2: 8.377296089620097}
_____
Afstand van bronindex 224 tot...
       Centrumindex 0:
              38 - 15.992481203007529 = 22.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 484.71565662275947
       Euclidische afstand: 22.016258915237152
 ._____
       Centrumindex 1:
              38 - 54.156682027649765 = -16.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 261.45460723311163
       Euclidische afstand: 16.169558040747795
 ._____
       Centrumindex 2:
              38 - 31.63235294117647 = 6.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 40.90457996924259
       Euclidische afstand: 6.395668844557432
{0: 22.016258915237152, 1: 16.169558040747795, 2: 6.395668844557432}
Afstand van bronindex 225 tot...
       Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 36.234453615240994
       Euclidische afstand: 6.0195060939616125
```

Centrumindex 1:

```
22 - 54.156682027649765 = -32.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1034.178109537259
      Euclidische afstand: 32.15863973393867
         _____
      Centrumindex 2:
             22 - 31.63235294117647 = -9.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 92.94379565551712
      Euclidische afstand: 9.640736261070371
 _____
{0: 6.0195060939616125, 1: 32.15863973393867, 2: 9.640736261070371}
______
Afstand van bronindex 226 tot...
      Centrumindex 0:
             19 - 15.992481203007529 = 3.0075187969924713
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 9.429942337045562
      Euclidische afstand: 3.0708211177217017
         -----
      Centrumindex 1:
             19 - 54.156682027649765 = -35.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1236.4085242838028
      Euclidische afstand: 35.16260121611885
_____
      Centrumindex 2:
             19 - 31.63235294117647 = -12.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 159.93399173394852
      Euclidische afstand: 12.64650116569593
 _____
{0: 3.0708211177217017, 1: 35.16260121611885, 2: 12.64650116569593}
  _____
Afstand van bronindex 227 tot...
      Centrumindex 0:
             20 - 15.992481203007529 = 4.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 16.204378427271106
      Euclidische afstand: 4.025466237253904
       ._____
      Centrumindex 1:
             20 - 54.156682027649765 = -34.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1166.804837647858
```

Euclidische afstand: 34.158525109375816

```
Centrumindex 2:
              20 - 31.63235294117647 = -11.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 135.473207420223
       Euclidische afstand: 11.639295830084524
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
Afstand van bronindex 228 tot...
       Centrumindex 0:
              18 - 15.992481203007529 = 2.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 4.174303239301221
       Euclidische afstand: 2.0431111666527646
       Centrumindex 1:
              18 - 54.156682027649765 = -36.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1307.431565758457
       Euclidische afstand: 36.15842316471305
 _____
       Centrumindex 2:
              18 - 31.63235294117647 = -13.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 186.00261918492888
       Euclidische afstand: 13.638277720626196
{0: 2.0431111666527646, 1: 36.15842316471305, 2: 13.638277720626196}
_____
Afstand van bronindex 229 tot...
       Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 144.32467917915065
       Euclidische afstand: 12.013520682096097
       Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 684.2979252054618
       Euclidische afstand: 26.1590887686376
 _____
       Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 13.355560361399464
      Euclidische afstand: 3.6545260104970474
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
-----
Afstand van bronindex 230 tot...
       Centrumindex 0:
              35 - 15.992481203007529 = 19.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 361.6705438408046
      Euclidische afstand: 19.017637704005317
 _____
       Centrumindex 1:
              35 - 54.156682027649765 = -19.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 367.3946993990102
      Euclidische afstand: 19.16754286284526
      Centrumindex 2:
              35 - 31.63235294117647 = 3.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 11.69869761630142
      Euclidische afstand: 3.420335892321311
  .....
{0: 19.017637704005317, 1: 19.16754286284526, 2: 3.420335892321311}
_____
Afstand van bronindex 231 tot...
      Centrumindex 0:
              29 - 15.992481203007529 = 13.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 169.3397167731356
      Euclidische afstand: 13.013059470129829
      Centrumindex 1:
              29 - 54.156682027649765 = -25.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 632.9845611501622
      Euclidische afstand: 25.15918442935228
      Centrumindex 2:
              29 - 31.63235294117647 = -2.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 7.090854479046523
      Euclidische afstand: 2.662865839475681
  ._____
```

{0: 13.013059470129829, 1: 25.15918442935228, 2: 2.662865839475681}

```
Afstand van bronindex 232 tot...
       Centrumindex 0:
              59 - 15.992481203007529 = 43.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1849.790844592684
       Euclidische afstand: 43.00919488426497
   -----
       Centrumindex 1:
              59 - 54.156682027649765 = 4.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 23.583639491176328
       Euclidische afstand: 4.856298949938763
       ______
       Centrumindex 2:
              59 - 31.63235294117647 = 27.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 749.1496780084582
       Euclidische afstand: 27.370598787904846
{0: 43.00919488426497, 1: 4.856298949938763, 2: 27.370598787904846}
Afstand van bronindex 233 tot...
       Centrumindex 0:
              5 - 15.992481203007529 = -10.992481203007529
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 121.21941602125636
       Euclidische afstand: 11.009968938251205
 _____
       Centrumindex 1:
              5 - 54.156682027649765 = -49.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 2416.795621057996
       Euclidische afstand: 49.16091558400836
       Centrumindex 2:
              5 - 31.63235294117647 = -26.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 709.6398740868897
       Euclidische afstand: 26.639066689486132
  _____
{0: 11.009968938251205, 1: 49.16091558400836, 2: 26.639066689486132}
_____
Afstand van bronindex 234 tot...
      Centrumindex 0:
```

```
24 - 15.992481203007529 = 8.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 64.26452880321087
       Euclidische afstand: 8.016516001556466
          ._____
       Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 909.5513814266599
       Euclidische afstand: 30.158769560886597
          _____
       Centrumindex 2:
              24 - 31.63235294117647 = -7.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 58.41438389081123
       Euclidische afstand: 7.642930320944397
    _____
{0: 8.016516001556466, 1: 30.158769560886597, 2: 7.642930320944397}
2
Afstand van bronindex 235 tot...
       Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 144.32467917915065
       Euclidische afstand: 12.013520682096097
       Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 684.2979252054618
       Euclidische afstand: 26.1590887686376
       Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 13.355560361399464
       Euclidische afstand: 3.6545260104970474
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
_____
Afstand van bronindex 236 tot...
       Centrumindex 0:
              44 - 15.992481203007529 = 28.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 784.5652806829097
```

Euclidische afstand: 28.010092479013878

```
Centrumindex 1:
              44 - 54.156682027649765 = -10.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 103.28410032066928
       Euclidische afstand: 10.1628785450122
       Centrumindex 2:
              44 - 31.63235294117647 = 12.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 153.12026624375238
       Euclidische afstand: 12.37417739664954
{0: 28.010092479013878, 1: 10.1628785450122, 2: 12.37417739664954}
  _____
Afstand van bronindex 237 tot...
       Centrumindex 0:
              8 - 15.992481203007529 = -7.992481203007529
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 64.26452880321119
       Euclidische afstand: 8.016516001556486
 ______
       Centrumindex 1:
              8 - 54.156682027649765 = -46.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 2130.8555288920975
       Euclidische afstand: 46.16119072220838
        ______
       Centrumindex 2:
              8 - 31.63235294117647 = -23.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 558.8457564398309
       Euclidische afstand: 23.639918706286426
{0: 8.016516001556486, 1: 46.16119072220838, 2: 23.639918706286426}
_____
Afstand van bronindex 238 tot...
       Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 9.189340833286163
       Euclidische afstand: 3.031392556777522
 _____
       Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
```

0 - 0.3548387096774193 = -0.3548387096774193

```
Totale euclidische som: 1236.1182017031574
      Euclidische afstand: 35.15847268729342
      Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 159.73791330257595
      Euclidische afstand: 12.638746508359757
     ._____
{0: 3.031392556777522, 1: 35.15847268729342, 2: 12.638746508359757}
_____
Afstand van bronindex 239 tot...
      Centrumindex 0:
              33 - 15.992481203007529 = 17.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 289.39986714907536
      Euclidische afstand: 17.011756733185297
      Centrumindex 1:
              33 - 54.156682027649765 = -21.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 447.73110492896416
      Euclidische afstand: 21.15965748609755
 ._____
       Centrumindex 2:
              33 - 31.63235294117647 = 1.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.0320309496347546
       Euclidische afstand: 1.4254932303012717
   -----
{0: 17.011756733185297, 1: 21.15965748609755, 2: 1.4254932303012717}
_____
Afstand van bronindex 240 tot...
      Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 144.32467917915065
      Euclidische afstand: 12.013520682096097
      Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 684.2979252054618
      Euclidische afstand: 26.1590887686376
```

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Centrumindex 2:

```
28 - 31.63235294117647 = -3.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 13.355560361399464
      Euclidische afstand: 3.6545260104970474
  _____
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
------
Afstand van bronindex 241 tot...
      Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 144.56528068291004
      Euclidische afstand: 12.023530292011163
       -----
      Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 684.5882477861069
      Euclidische afstand: 26.164637352466915
          ._____
       Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 13.551638792772014
      Euclidische afstand: 3.6812550567397544
{0: 12.023530292011163, 1: 26.164637352466915, 2: 3.6812550567397544}
_____
Afstand van bronindex 242 tot...
      Centrumindex 0:
              29 - 15.992481203007529 = 13.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 169.3397167731356
      Euclidische afstand: 13.013059470129829
      Centrumindex 1:
              29 - 54.156682027649765 = -25.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 632.9845611501622
      Euclidische afstand: 25.15918442935228
       ._____
      Centrumindex 2:
              29 - 31.63235294117647 = -2.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 7.090854479046523
```

Euclidische afstand: 2.662865839475681

```
{0: 13.013059470129829, 1: 25.15918442935228, 2: 2.662865839475681}
_____
Afstand van bronindex 243 tot...
      Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 36.234453615240994
      Euclidische afstand: 6.0195060939616125
          .____
       Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1034.178109537259
      Euclidische afstand: 32.15863973393867
 _____
      Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 92.94379565551712
      Euclidische afstand: 9.640736261070371
  _____
{0: 6.0195060939616125, 1: 32.15863973393867, 2: 9.640736261070371}
Afstand van bronindex 244 tot...
      Centrumindex 0:
              30 - 15.992481203007529 = 14.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 196.35475436712053
      Euclidische afstand: 14.012664071015209
      Centrumindex 1:
              30 - 54.156682027649765 = -24.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 583.6711970948627
      Euclidische afstand: 24.159288008856194
       Centrumindex 2:
              30 - 31.63235294117647 = -1.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.8261485966935807
       Euclidische afstand: 1.681115283582176
{0: 14.012664071015209, 1: 24.159288008856194, 2: 1.681115283582176}
```

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```
Afstand van bronindex 245 tot...
       Centrumindex 0:
               44 - 15.992481203007529 = 28.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 784.5652806829097
       Euclidische afstand: 28.010092479013878
       Centrumindex 1:
               44 - 54.156682027649765 = -10.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 103.28410032066928
       Euclidische afstand: 10.1628785450122
       Centrumindex 2:
               44 - 31.63235294117647 = 12.367647058823529
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 153.12026624375238
       Euclidische afstand: 12.37417739664954
{0: 28.010092479013878, 1: 10.1628785450122, 2: 12.37417739664954}
    ______
Afstand van bronindex 246 tot...
       Centrumindex 0:
               25 - 15.992481203007529 = 9.007518796992471
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 81.27956639719581
       Euclidische afstand: 9.01551808811872
        _____
       Centrumindex 1:
               25 - 54.156682027649765 = -29.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 850.2380173713603
       Euclidische afstand: 29.158841152750917
       Centrumindex 2:
               25 - 31.63235294117647 = -6.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 44.14967800845829
       Euclidische afstand: 6.644522406347825
{0: 9.01551808811872, 1: 29.158841152750917, 2: 6.644522406347825}
______
Afstand van bronindex 247 tot...
       Centrumindex 0:
               24 - 15.992481203007529 = 8.007518796992471
```

1 - 0.3796992481203007 = 0.6203007518796992

```
Totale euclidische som: 64.50513030697027
       Euclidische afstand: 8.031508594714337
       Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 909.841704007305
       Euclidische afstand: 30.163582413355762
   _____
       Centrumindex 2:
              24 - 31.63235294117647 = -7.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 58.61046232218378
       Euclidische afstand: 7.655747012681635
  -----
{0: 8.031508594714337, 1: 30.163582413355762, 2: 7.655747012681635}
_____
Afstand van bronindex 248 tot...
      Centrumindex 0:
              37 - 15.992481203007529 = 21.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 441.7006190287745
       Euclidische afstand: 21.016674785245513
 ._____
       Centrumindex 1:
              37 - 54.156682027649765 = -17.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 294.76797128841116
       Euclidische afstand: 17.168808091664697
 ._____
       Centrumindex 2:
              37 - 31.63235294117647 = 5.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 29.169285851595536
       Euclidische afstand: 5.400859732634753
{0: 21.016674785245513, 1: 17.168808091664697, 2: 5.400859732634753}
Afstand van bronindex 249 tot...
       Centrumindex 0:
              54 - 15.992481203007529 = 38.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1444.715656622759
       Euclidische afstand: 38.009415368073725
```

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Centrumindex 1:

```
54 - 54.156682027649765 = -0.15668202764976513
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 0.15045976767397765
      Euclidische afstand: 0.38789143800034775
         -----
      Centrumindex 2:
             54 - 31.63235294117647 = 22.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 500.473207420223
      Euclidische afstand: 22.371258512212115
 _____
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
______
Afstand van bronindex 250 tot...
      Centrumindex 0:
             28 - 15.992481203007529 = 12.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 144.32467917915065
      Euclidische afstand: 12.013520682096097
         ._____
      Centrumindex 1:
             28 - 54.156682027649765 = -26.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 684.2979252054618
      Euclidische afstand: 26.1590887686376
 _____
      Centrumindex 2:
             28 - 31.63235294117647 = -3.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 13.355560361399464
      Euclidische afstand: 3.6545260104970474
 _____
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
  _____
Afstand van bronindex 251 tot...
      Centrumindex 0:
             29 - 15.992481203007529 = 13.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 169.3397167731356
      Euclidische afstand: 13.013059470129829
       _____
      Centrumindex 1:
             29 - 54.156682027649765 = -25.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 632.9845611501622
      Euclidische afstand: 25.15918442935228
```

```
Centrumindex 2:
              29 - 31.63235294117647 = -2.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 7.090854479046523
       Euclidische afstand: 2.662865839475681
{0: 13.013059470129829, 1: 25.15918442935228, 2: 2.662865839475681}
Afstand van bronindex 252 tot...
       Centrumindex 0:
              62 - 15.992481203007529 = 46.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 2116.835957374639
       Euclidische afstand: 46.009085595941144
       Centrumindex 1:
              62 - 54.156682027649765 = 7.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 61.64354732527774
       Euclidische afstand: 7.85134047951544
 _____
       Centrumindex 2:
              62 - 31.63235294117647 = 30.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 922.3555603613994
       Euclidische afstand: 30.370307215459633
{0: 46.009085595941144, 1: 7.85134047951544, 2: 30.370307215459633}
_____
Afstand van bronindex 253 tot...
       Centrumindex 0:
              30 - 15.992481203007529 = 14.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 196.35475436712053
       Euclidische afstand: 14.012664071015209
       Centrumindex 1:
              30 - 54.156682027649765 = -24.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 583.6711970948627
       Euclidische afstand: 24.159288008856194
 _____
       Centrumindex 2:
              30 - 31.63235294117647 = -1.632352941176471
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 2.8261485966935807
      Euclidische afstand: 1.681115283582176
{0: 14.012664071015209, 1: 24.159288008856194, 2: 1.681115283582176}
-----
Afstand van bronindex 254 tot...
       Centrumindex 0:
              41 - 15.992481203007529 = 25.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 625.5201679009549
      Euclidische afstand: 25.01040119432223
 _____
       Centrumindex 1:
              41 - 54.156682027649765 = -13.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 173.22419248656786
      Euclidische afstand: 13.161466198207853
      Centrumindex 2:
              41 - 31.63235294117647 = 9.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 87.91438389081122
      Euclidische afstand: 9.376267055220389
  -----
{0: 25.01040119432223, 1: 13.161466198207853, 2: 9.376267055220389}
_____
Afstand van bronindex 255 tot...
      Centrumindex 0:
              29 - 15.992481203007529 = 13.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 169.58031827689499
      Euclidische afstand: 13.022300805805976
      Centrumindex 1:
              29 - 54.156682027649765 = -25.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 633.2748837308073
      Euclidische afstand: 25.164953481594345
      Centrumindex 2:
              29 - 31.63235294117647 = -2.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 7.286932910419072
      Euclidische afstand: 2.6994319606945223
  .-----
```

{0: 13.022300805805976, 1: 25.164953481594345, 2: 2.6994319606945223}

```
_____
Afstand van bronindex 256 tot...
      Centrumindex 0:
             28 - 15.992481203007529 = 12.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 144.56528068291004
      Euclidische afstand: 12.023530292011163
  _____
      Centrumindex 1:
             28 - 54.156682027649765 = -26.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 684.5882477861069
      Euclidische afstand: 26.164637352466915
       ______
      Centrumindex 2:
             28 - 31.63235294117647 = -3.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 13.551638792772014
      Euclidische afstand: 3.6812550567397544
{0: 12.023530292011163, 1: 26.164637352466915, 2: 3.6812550567397544}
Afstand van bronindex 257 tot...
      Centrumindex 0:
             30 - 15.992481203007529 = 14.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 196.59535587087993
      Euclidische afstand: 14.021246587621228
 _____
      Centrumindex 1:
             30 - 54.156682027649765 = -24.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 583.9615196755078
      Euclidische afstand: 24.16529577049509
      Centrumindex 2:
             30 - 31.63235294117647 = -1.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 3.02222702806613
      Euclidische afstand: 1.738455356937914
 _____
{0: 14.021246587621228, 1: 24.16529577049509, 2: 1.738455356937914}
_____
Afstand van bronindex 258 tot...
```

Centrumindex 0:

```
35 - 15.992481203007529 = 19.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 361.6705438408046
       Euclidische afstand: 19.017637704005317
          -----
       Centrumindex 1:
              35 - 54.156682027649765 = -19.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 367.3946993990102
       Euclidische afstand: 19.16754286284526
 _____
       Centrumindex 2:
              35 - 31.63235294117647 = 3.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 11.69869761630142
       Euclidische afstand: 3.420335892321311
   _____
{0: 19.017637704005317, 1: 19.16754286284526, 2: 3.420335892321311}
2
Afstand van bronindex 259 tot...
       Centrumindex 0:
              50 - 15.992481203007529 = 34.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1156.896107750579
       Euclidische afstand: 34.01317550230468
 _____
       Centrumindex 1:
              50 - 54.156682027649765 = -4.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 17.69423856951726
       Euclidische afstand: 4.206452016785317
       Centrumindex 2:
              50 - 31.63235294117647 = 18.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 337.7281093810073
       Euclidische afstand: 18.377380373192675
{0: 34.01317550230468, 1: 4.206452016785317, 2: 18.377380373192675}
_____
Afstand van bronindex 260 tot...
       Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 144.32467917915065
```

Euclidische afstand: 12.013520682096097

```
Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 684.2979252054618
       Euclidische afstand: 26.1590887686376
       Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 13.355560361399464
       Euclidische afstand: 3.6545260104970474
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
  _____
Afstand van bronindex 261 tot...
       Centrumindex 0:
              3 - 15.992481203007529 = -12.992481203007529
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 169.18934083328648
       Euclidische afstand: 13.007280301173127
 ______
       Centrumindex 1:
              3 - 54.156682027649765 = -51.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 2617.4223491685952
       Euclidische afstand: 51.16075008410838
        _____
       Centrumindex 2:
              3 - 31.63235294117647 = -28.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 820.1692858515955
       Euclidische afstand: 28.638597833196993
{0: 13.007280301173127, 1: 51.16075008410838, 2: 28.638597833196993}
_____
Afstand van bronindex 262 tot...
       Centrumindex 0:
              52 - 15.992481203007529 = 36.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1296.6855814347891
       Euclidische afstand: 36.00952070542996
 _____
       Centrumindex 1:
              52 - 54.156682027649765 = -2.156682027649765
```

0 - 0.3548387096774193 = -0.3548387096774193

```
Totale euclidische som: 4.777187878273038
       Euclidische afstand: 2.1856778990219574
      Centrumindex 2:
              52 - 31.63235294117647 = 20.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 415.0026191849289
      Euclidische afstand: 20.37161307272767
     -----
{0: 36.00952070542996, 1: 2.1856778990219574, 2: 20.37161307272767}
_____
Afstand van bronindex 263 tot...
      Centrumindex 0:
              40 - 15.992481203007529 = 24.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 576.5051303069699
      Euclidische afstand: 24.01052124188415
      Centrumindex 1:
              40 - 54.156682027649765 = -14.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 200.5375565418674
      Euclidische afstand: 14.161128364006428
 ._____
       Centrumindex 2:
              40 - 31.63235294117647 = 8.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 70.17908977316416
       Euclidische afstand: 8.377296089620097
   _____
{0: 24.01052124188415, 1: 14.161128364006428, 2: 8.377296089620097}
_____
Afstand van bronindex 264 tot...
      Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 144.32467917915065
      Euclidische afstand: 12.013520682096097
      Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 684.2979252054618
      Euclidische afstand: 26.1590887686376
```

Centrumindex 2:

```
28 - 31.63235294117647 = -3.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 13.355560361399464
      Euclidische afstand: 3.6545260104970474
  _____
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
------
Afstand van bronindex 265 tot...
      Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 400.4449799310302
      Euclidische afstand: 20.011121406133896
       -----
      Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 329.79101276306557
      Euclidische afstand: 18.160149029208586
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 19.23791330257593
      Euclidische afstand: 4.386104570410506
 _____
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
_____
Afstand van bronindex 266 tot...
      Centrumindex 0:
              16 - 15.992481203007529 = 0.007518796992471266
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 0.14422805133133568
      Euclidische afstand: 0.3797736843586397
      Centrumindex 1:
              16 - 54.156682027649765 = -38.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1456.0582938690561
      Euclidische afstand: 38.15833190626991
       .____
      Centrumindex 2:
              16 - 31.63235294117647 = -15.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 244.53203094963476
```

Euclidische afstand: 15.637519974396028

```
{0: 0.3797736843586397, 1: 38.15833190626991, 2: 15.637519974396028}
_____
Afstand van bronindex 267 tot...
      Centrumindex 0:
             25 - 15.992481203007529 = 9.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 81.52016790095522
      Euclidische afstand: 9.028851970264837
          _____
      Centrumindex 1:
             25 - 54.156682027649765 = -29.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 850.5283399520055
      Euclidische afstand: 29.1638190220692
  _____
      Centrumindex 2:
             25 - 31.63235294117647 = -6.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 44.345756439830836
      Euclidische afstand: 6.659260952976001
._____
{0: 9.028851970264837, 1: 29.1638190220692, 2: 6.659260952976001}
_____
Afstand van bronindex 268 tot...
      Centrumindex 0:
             58 - 15.992481203007529 = 42.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1765.0164085024585
      Euclidische afstand: 42.012098358716365
      Centrumindex 1:
             58 - 54.156682027649765 = 3.843317972350235
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 15.187326127121018
      Euclidische afstand: 3.8970920090653514
      Centrumindex 2:
             58 - 31.63235294117647 = 26.36764705882353
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 695.6104623221838
      Euclidische afstand: 26.374428189482778
    ._____
{0: 42.012098358716365, 1: 3.8970920090653514, 2: 26.374428189482778}
```

```
Afstand van bronindex 269 tot...
       Centrumindex 0:
               35 - 15.992481203007529 = 19.00751879699247
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 361.6705438408046
       Euclidische afstand: 19.017637704005317
       Centrumindex 1:
               35 - 54.156682027649765 = -19.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 367.3946993990102
       Euclidische afstand: 19.16754286284526
       Centrumindex 2:
               35 - 31.63235294117647 = 3.367647058823529
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 11.69869761630142
       Euclidische afstand: 3.420335892321311
{0: 19.017637704005317, 1: 19.16754286284526, 2: 3.420335892321311}
    _____
Afstand van bronindex 270 tot...
       Centrumindex 0:
               28 - 15.992481203007529 = 12.007518796992471
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 144.32467917915065
       Euclidische afstand: 12.013520682096097
        ______
       Centrumindex 1:
               28 - 54.156682027649765 = -26.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 684.2979252054618
       Euclidische afstand: 26.1590887686376
       Centrumindex 2:
               28 - 31.63235294117647 = -3.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 13.355560361399464
       Euclidische afstand: 3.6545260104970474
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
______
Afstand van bronindex 271 tot...
       Centrumindex 0:
               25 - 15.992481203007529 = 9.007518796992471
```

1 - 0.3796992481203007 = 0.6203007518796992

```
Totale euclidische som: 81.52016790095522
      Euclidische afstand: 9.028851970264837
      Centrumindex 1:
              25 - 54.156682027649765 = -29.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 850.5283399520055
      Euclidische afstand: 29.1638190220692
  -----
      Centrumindex 2:
              25 - 31.63235294117647 = -6.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 44.345756439830836
      Euclidische afstand: 6.659260952976001
  _____
{0: 9.028851970264837, 1: 29.1638190220692, 2: 6.659260952976001}
_____
Afstand van bronindex 272 tot...
      Centrumindex 0:
             41 - 15.992481203007529 = 25.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 625.7607694047143
      Euclidische afstand: 25.015210760749437
 ._____
       Centrumindex 1:
              41 - 54.156682027649765 = -13.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 173.51451506721304
      Euclidische afstand: 13.172490845212725
 ._____
       Centrumindex 2:
              41 - 31.63235294117647 = 9.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 88.11046232218376
      Euclidische afstand: 9.38671733473336
{0: 25.015210760749437, 1: 13.172490845212725, 2: 9.38671733473336}
Afstand van bronindex 273 tot...
      Centrumindex 0:
              37 - 15.992481203007529 = 21.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 441.46001752501513
      Euclidische afstand: 21.01094994342272
```

Centrumindex 1:

```
37 - 54.156682027649765 = -17.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 294.47764870776604
      Euclidische afstand: 17.16035106598248
         -----
      Centrumindex 2:
             37 - 31.63235294117647 = 5.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 28.973207420222987
      Euclidische afstand: 5.382676603718915
{0: 21.01094994342272, 1: 17.16035106598248, 2: 5.382676603718915}
______
Afstand van bronindex 274 tot...
      Centrumindex 0:
             28 - 15.992481203007529 = 12.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 144.56528068291004
      Euclidische afstand: 12.023530292011163
          ._____
      Centrumindex 1:
             28 - 54.156682027649765 = -26.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 684.5882477861069
      Euclidische afstand: 26.164637352466915
 _____
      Centrumindex 2:
             28 - 31.63235294117647 = -3.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 13.551638792772014
      Euclidische afstand: 3.6812550567397544
 _____
{0: 12.023530292011163, 1: 26.164637352466915, 2: 3.6812550567397544}
  -----
Afstand van bronindex 275 tot...
      Centrumindex 0:
             63 - 15.992481203007529 = 47.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 2210.091596472383
      Euclidische afstand: 47.01161129415139
       .____
      Centrumindex 1:
             63 - 54.156682027649765 = 8.843317972350235
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 78.62050585062336
```

Euclidische afstand: 8.866820504026421

```
Centrumindex 2:
              63 - 31.63235294117647 = 31.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 984.2869329104191
       Euclidische afstand: 31.37334749290262
{0: 47.01161129415139, 1: 8.866820504026421, 2: 31.37334749290262}
Afstand van bronindex 276 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 841.5803182768947
       Euclidische afstand: 29.010003762097217
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 83.97073626536975
       Euclidische afstand: 9.16355478323613
 _____
       Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 178.85556036139945
       Euclidische afstand: 13.373689108148113
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
Afstand van bronindex 277 tot...
       Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 144.32467917915065
       Euclidische afstand: 12.013520682096097
       Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 684.2979252054618
       Euclidische afstand: 26.1590887686376
 ._____
       Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 13.355560361399464
       Euclidische afstand: 3.6545260104970474
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
-----
Afstand van bronindex 278 tot...
       Centrumindex 0:
              7 - 15.992481203007529 = -8.992481203007529
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 81.00888970546684
       Euclidische afstand: 9.00049385897612
       Centrumindex 1:
              7 - 54.156682027649765 = -47.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 2223.8785703667522
       Euclidische afstand: 47.158017031749246
       Centrumindex 2:
              7 - 31.63235294117647 = -24.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 606.9143838908112
       Euclidische afstand: 24.635632402899894
  ._____
{0: 9.00049385897612, 1: 47.158017031749246, 2: 24.635632402899894}
_____
Afstand van bronindex 279 tot...
       Centrumindex 0:
              35 - 15.992481203007529 = 19.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 361.6705438408046
      Euclidische afstand: 19.017637704005317
       Centrumindex 1:
              35 - 54.156682027649765 = -19.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 367.3946993990102
       Euclidische afstand: 19.16754286284526
       Centrumindex 2:
              35 - 31.63235294117647 = 3.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 11.69869761630142
       Euclidische afstand: 3.420335892321311
  .-----
```

{0: 19.017637704005317, 1: 19.16754286284526, 2: 3.420335892321311}

```
_____
Afstand van bronindex 280 tot...
      Centrumindex 0:
             65 - 15.992481203007529 = 49.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 2401.8810701565935
      Euclidische afstand: 49.00898968716447
  _____
      Centrumindex 1:
             65 - 54.156682027649765 = 10.843317972350235
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 117.70345515937915
      Euclidische afstand: 10.849122322076525
       -----
      Centrumindex 2:
             65 - 31.63235294117647 = 33.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 1113.5614427143407
      Euclidische afstand: 33.37006806577327
{0: 49.00898968716447, 1: 10.849122322076525, 2: 33.37006806577327}
Afstand van bronindex 281 tot...
      Centrumindex 0:
             28 - 15.992481203007529 = 12.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 144.32467917915065
      Euclidische afstand: 12.013520682096097
 _____
      Centrumindex 1:
             28 - 54.156682027649765 = -26.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 684.2979252054618
      Euclidische afstand: 26.1590887686376
      Centrumindex 2:
             28 - 31.63235294117647 = -3.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 13.355560361399464
      Euclidische afstand: 3.6545260104970474
 _____
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
_____
Afstand van bronindex 282 tot...
      Centrumindex 0:
```

```
16 - 15.992481203007529 = 0.007518796992471266
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 0.14422805133133568
       Euclidische afstand: 0.3797736843586397
          -----
       Centrumindex 1:
              16 - 54.156682027649765 = -38.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1456.0582938690561
       Euclidische afstand: 38.15833190626991
       _____
       Centrumindex 2:
              16 - 31.63235294117647 = -15.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 244.53203094963476
       Euclidische afstand: 15.637519974396028
    _____
{0: 0.3797736843586397, 1: 38.15833190626991, 2: 15.637519974396028}
Afstand van bronindex 283 tot...
       Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 9.429942337045562
       Euclidische afstand: 3.0708211177217017
 _____
       Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1236.4085242838028
       Euclidische afstand: 35.16260121611885
       Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 159.93399173394852
       Euclidische afstand: 12.64650116569593
{0: 3.0708211177217017, 1: 35.16260121611885, 2: 12.64650116569593}
_____
Afstand van bronindex 284 tot...
       Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 144.32467917915065
```

Euclidische afstand: 12.013520682096097

```
Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 684.2979252054618
       Euclidische afstand: 26.1590887686376
       Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 13.355560361399464
       Euclidische afstand: 3.6545260104970474
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
  _____
Afstand van bronindex 285 tot...
       Centrumindex 0:
              33 - 15.992481203007529 = 17.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 289.39986714907536
       Euclidische afstand: 17.011756733185297
 _____
       Centrumindex 1:
              33 - 54.156682027649765 = -21.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 447.73110492896416
       Euclidische afstand: 21.15965748609755
        -----
       Centrumindex 2:
              33 - 31.63235294117647 = 1.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.0320309496347546
       Euclidische afstand: 1.4254932303012717
{0: 17.011756733185297, 1: 21.15965748609755, 2: 1.4254932303012717}
_____
Afstand van bronindex 286 tot...
       Centrumindex 0:
              30 - 15.992481203007529 = 14.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 196.59535587087993
       Euclidische afstand: 14.021246587621228
 ._____
       Centrumindex 1:
              30 - 54.156682027649765 = -24.156682027649765
```

1 - 0.3548387096774193 = 0.6451612903225807

```
Totale euclidische som: 583.9615196755078
      Euclidische afstand: 24.16529577049509
      Centrumindex 2:
              30 - 31.63235294117647 = -1.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 3.02222702806613
      Euclidische afstand: 1.738455356937914
     -----
{0: 14.021246587621228, 1: 24.16529577049509, 2: 1.738455356937914}
_____
Afstand van bronindex 287 tot...
      Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 36.234453615240994
      Euclidische afstand: 6.0195060939616125
      Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1034.178109537259
      Euclidische afstand: 32.15863973393867
 ._____
       Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 92.94379565551712
       Euclidische afstand: 9.640736261070371
   -----
{0: 6.0195060939616125, 1: 32.15863973393867, 2: 9.640736261070371}
_____
Afstand van bronindex 288 tot...
      Centrumindex 0:
              42 - 15.992481203007529 = 26.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 676.7758069986992
      Euclidische afstand: 26.01491508728597
      Centrumindex 1:
              42 - 54.156682027649765 = -12.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 148.2011510119135
      Euclidische afstand: 12.173789509101654
```

Centrumindex 2:

```
42 - 31.63235294117647 = 10.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 107.84575643983082
      Euclidische afstand: 10.38488114712108
 _____
{0: 26.01491508728597, 1: 12.173789509101654, 2: 10.38488114712108}
------
Afstand van bronindex 289 tot...
      Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 36.47505511900039
      Euclidische afstand: 6.039458180913283
       -----
      Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1034.4684321179043
      Euclidische afstand: 32.16315332982611
          -----
       Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 93.13987408688966
      Euclidische afstand: 9.650900169771194
{0: 6.039458180913283, 1: 32.16315332982611, 2: 9.650900169771194}
_____
Afstand van bronindex 290 tot...
      Centrumindex 0:
              26 - 15.992481203007529 = 10.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 100.53520549494016
      Euclidische afstand: 10.026724564629276
      Centrumindex 1:
              26 - 54.156682027649765 = -28.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 793.2149758967059
      Euclidische afstand: 28.164072430966122
       .____
      Centrumindex 2:
              26 - 31.63235294117647 = -5.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 32.081050557477894
```

Euclidische afstand: 5.66401364382872

```
{0: 10.026724564629276, 1: 28.164072430966122, 2: 5.66401364382872}
_____
Afstand van bronindex 291 tot...
      Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 9.429942337045562
      Euclidische afstand: 3.0708211177217017
          _____
       Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1236.4085242838028
      Euclidische afstand: 35.16260121611885
  _____
      Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 159.93399173394852
      Euclidische afstand: 12.64650116569593
   _____
{0: 3.0708211177217017, 1: 35.16260121611885, 2: 12.64650116569593}
Afstand van bronindex 292 tot...
      Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 400.4449799310302
      Euclidische afstand: 20.011121406133896
      Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 329.79101276306557
      Euclidische afstand: 18.160149029208586
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 19.23791330257593
       Euclidische afstand: 4.386104570410506
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
```

-----

```
Afstand van bronindex 293 tot...
       Centrumindex 0:
               24 - 15.992481203007529 = 8.007518796992471
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 64.26452880321087
       Euclidische afstand: 8.016516001556466
       Centrumindex 1:
               24 - 54.156682027649765 = -30.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 909.5513814266599
       Euclidische afstand: 30.158769560886597
       Centrumindex 2:
               24 - 31.63235294117647 = -7.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 58.41438389081123
       Euclidische afstand: 7.642930320944397
{0: 8.016516001556466, 1: 30.158769560886597, 2: 7.642930320944397}
    _____
Afstand van bronindex 294 tot...
       Centrumindex 0:
               24 - 15.992481203007529 = 8.007518796992471
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 64.26452880321087
       Euclidische afstand: 8.016516001556466
        _____
       Centrumindex 1:
               24 - 54.156682027649765 = -30.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 909.5513814266599
       Euclidische afstand: 30.158769560886597
       Centrumindex 2:
               24 - 31.63235294117647 = -7.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 58.41438389081123
       Euclidische afstand: 7.642930320944397
{0: 8.016516001556466, 1: 30.158769560886597, 2: 7.642930320944397}
______
Afstand van bronindex 295 tot...
       Centrumindex 0:
               28 - 15.992481203007529 = 12.007518796992471
```

0 - 0.3796992481203007 = -0.3796992481203007

```
Totale euclidische som: 144.32467917915065
       Euclidische afstand: 12.013520682096097
      Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 684.2979252054618
      Euclidische afstand: 26.1590887686376
   _____
      Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 13.355560361399464
      Euclidische afstand: 3.6545260104970474
  _____
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
_____
Afstand van bronindex 296 tot...
      Centrumindex 0:
              23 - 15.992481203007529 = 7.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 49.24949120922594
      Euclidische afstand: 7.017798173873764
 ._____
       Centrumindex 1:
              23 - 54.156682027649765 = -31.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 970.8647454819594
      Euclidische afstand: 31.158702564162702
 _____
       Centrumindex 2:
              23 - 31.63235294117647 = -8.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 74.67908977316418
      Euclidische afstand: 8.641706415585071
{0: 7.017798173873764, 1: 31.158702564162702, 2: 8.641706415585071}
Afstand van bronindex 297 tot...
      Centrumindex 0:
              2 - 15.992481203007529 = -13.992481203007529
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 195.93370173554214
      Euclidische afstand: 13.997632004576422
```

Centrumindex 1:

```
2 - 54.156682027649765 = -52.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 2720.4453906432495
      Euclidische afstand: 52.1578890547082
         -----
      Centrumindex 2:
             2 - 31.63235294117647 = -29.63235294117647
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 878.237913302576
      Euclidische afstand: 29.63507910066339
  ______
{0: 13.997632004576422, 1: 52.1578890547082, 2: 29.63507910066339}
______
Afstand van bronindex 298 tot...
      Centrumindex 0:
             53 - 15.992481203007529 = 37.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1369.9412205325336
      Euclidische afstand: 37.012717010948194
         -----
      Centrumindex 1:
             53 - 54.156682027649765 = -1.1566820276497651
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1.7541464036186694
      Euclidische afstand: 1.324441921572505
      Centrumindex 2:
             53 - 31.63235294117647 = 21.36764705882353
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 456.93399173394846
      Euclidische afstand: 21.376014402454647
 _____
{0: 37.012717010948194, 1: 1.324441921572505, 2: 21.376014402454647}
  -----
Afstand van bronindex 299 tot...
      Centrumindex 0:
             50 - 15.992481203007529 = 34.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1156.896107750579
      Euclidische afstand: 34.01317550230468
       .____
      Centrumindex 1:
             50 - 54.156682027649765 = -4.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 17.69423856951726
```

Euclidische afstand: 4.206452016785317

```
Centrumindex 2:
              50 - 31.63235294117647 = 18.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 337.7281093810073
       Euclidische afstand: 18.377380373192675
{0: 34.01317550230468, 1: 4.206452016785317, 2: 18.377380373192675}
Afstand van bronindex 300 tot...
       Centrumindex 0:
              53 - 15.992481203007529 = 37.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1369.9412205325336
       Euclidische afstand: 37.012717010948194
       Centrumindex 1:
              53 - 54.156682027649765 = -1.1566820276497651
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1.7541464036186694
       Euclidische afstand: 1.324441921572505
 _____
       Centrumindex 2:
              53 - 31.63235294117647 = 21.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 456.93399173394846
       Euclidische afstand: 21.376014402454647
{0: 37.012717010948194, 1: 1.324441921572505, 2: 21.376014402454647}
Afstand van bronindex 301 tot...
       Centrumindex 0:
              53 - 15.992481203007529 = 37.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1369.9412205325336
       Euclidische afstand: 37.012717010948194
       Centrumindex 1:
              53 - 54.156682027649765 = -1.1566820276497651
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1.7541464036186694
       Euclidische afstand: 1.324441921572505
 ______
       Centrumindex 2:
              53 - 31.63235294117647 = 21.36764705882353
```

1 - 0.4019607843137254 = 0.5980392156862746

```
Totale euclidische som: 456.93399173394846
       Euclidische afstand: 21.376014402454647
{0: 37.012717010948194, 1: 1.324441921572505, 2: 21.376014402454647}
-----
Afstand van bronindex 302 tot...
       Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 9.189340833286163
       Euclidische afstand: 3.031392556777522
       Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1236.1182017031574
       Euclidische afstand: 35.15847268729342
       Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 159.73791330257595
       Euclidische afstand: 12.638746508359757
   _____
{0: 3.031392556777522, 1: 35.15847268729342, 2: 12.638746508359757}
_____
Afstand van bronindex 303 tot...
       Centrumindex 0:
              53 - 15.992481203007529 = 37.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1369.9412205325336
      Euclidische afstand: 37.012717010948194
       Centrumindex 1:
              53 - 54.156682027649765 = -1.1566820276497651
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1.7541464036186694
      Euclidische afstand: 1.324441921572505
       Centrumindex 2:
              53 - 31.63235294117647 = 21.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 456.93399173394846
       Euclidische afstand: 21.376014402454647
  .-----
{0: 37.012717010948194, 1: 1.324441921572505, 2: 21.376014402454647}
```

```
_____
Afstand van bronindex 304 tot...
      Centrumindex 0:
              53 - 15.992481203007529 = 37.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1369.700619028774
      Euclidische afstand: 37.00946661367567
      Centrumindex 1:
              53 - 54.156682027649765 = -1.1566820276497651
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1.463823822973508
      Euclidische afstand: 1.2098858718794547
       ______
      Centrumindex 2:
              53 - 31.63235294117647 = 21.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 456.7379133025759
      Euclidische afstand: 21.371427498007144
{0: 37.00946661367567, 1: 1.2098858718794547, 2: 21.371427498007144}
Afstand van bronindex 305 tot...
       Centrumindex 0:
              92 - 15.992481203007529 = 76.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 5777.527686697947
      Euclidische afstand: 76.01004990590354
 ._____
       Centrumindex 1:
              92 - 54.156682027649765 = 37.843317972350235
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1432.5329482469372
      Euclidische afstand: 37.84881699930577
      Centrumindex 2:
              92 - 31.63235294117647 = 60.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 3644.610462322184
      Euclidische afstand: 60.37060925916008
 _____
{0: 76.01004990590354, 1: 37.84881699930577, 2: 60.37060925916008}
_____
Afstand van bronindex 306 tot...
      Centrumindex 0:
```

```
86 - 15.992481203007529 = 70.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 4901.437461134037
       Euclidische afstand: 70.01026682661649
          ._____
       Centrumindex 1:
              86 - 54.156682027649765 = 31.843317972350235
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1014.4131325787341
       Euclidische afstand: 31.849852944381613
          _____
       Centrumindex 2:
              86 - 31.63235294117647 = 54.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 2956.1986976163016
       Euclidische afstand: 54.37093614805893
    _____
{0: 70.01026682661649, 1: 31.849852944381613, 2: 54.37093614805893}
Afstand van bronindex 307 tot...
       Centrumindex 0:
              17 - 15.992481203007529 = 1.0075187969924713
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1.3998671490756767
       Euclidische afstand: 1.183159815526067
       Centrumindex 1:
              17 - 54.156682027649765 = -37.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1381.0352523944018
       Euclidische afstand: 37.16228265855586
       Centrumindex 2:
              17 - 31.63235294117647 = -14.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 214.4634034986544
       Euclidische afstand: 14.644569078626192
{0: 1.183159815526067, 1: 37.16228265855586, 2: 14.644569078626192}
_____
Afstand van bronindex 308 tot...
       Centrumindex 0:
              30 - 15.992481203007529 = 14.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 196.35475436712053
```

Euclidische afstand: 14.012664071015209

```
Centrumindex 1:
              30 - 54.156682027649765 = -24.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 583.6711970948627
       Euclidische afstand: 24.159288008856194
       Centrumindex 2:
              30 - 31.63235294117647 = -1.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.8261485966935807
       Euclidische afstand: 1.681115283582176
{0: 14.012664071015209, 1: 24.159288008856194, 2: 1.681115283582176}
  -----
Afstand van bronindex 309 tot...
       Centrumindex 0:
              30 - 15.992481203007529 = 14.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 196.59535587087993
       Euclidische afstand: 14.021246587621228
 _____
       Centrumindex 1:
              30 - 54.156682027649765 = -24.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 583.9615196755078
       Euclidische afstand: 24.16529577049509
        _____
       Centrumindex 2:
              30 - 31.63235294117647 = -1.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 3.02222702806613
       Euclidische afstand: 1.738455356937914
{0: 14.021246587621228, 1: 24.16529577049509, 2: 1.738455356937914}
______
Afstand van bronindex 310 tot...
       Centrumindex 0:
              24 - 15.992481203007529 = 8.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 64.50513030697027
       Euclidische afstand: 8.031508594714337
 ._____
       Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
```

1 - 0.3548387096774193 = 0.6451612903225807

```
Totale euclidische som: 909.841704007305
       Euclidische afstand: 30.163582413355762
       Centrumindex 2:
              24 - 31.63235294117647 = -7.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 58.61046232218378
       Euclidische afstand: 7.655747012681635
      ._____
{0: 8.031508594714337, 1: 30.163582413355762, 2: 7.655747012681635}
_____
Afstand van bronindex 311 tot...
       Centrumindex 0:
              18 - 15.992481203007529 = 2.0075187969924713
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 4.414904743060619
       Euclidische afstand: 2.1011674714454864
       Centrumindex 1:
              18 - 54.156682027649765 = -36.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1307.7218883391024
       Euclidische afstand: 36.16243753315175
 ._____
       Centrumindex 2:
              18 - 31.63235294117647 = -13.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 186.19869761630144
       Euclidische afstand: 13.645464360596215
{0: 2.1011674714454864, 1: 36.16243753315175, 2: 13.645464360596215}
_____
Afstand van bronindex 312 tot...
       Centrumindex 0:
              26 - 15.992481203007529 = 10.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 100.29460399118075
       Euclidische afstand: 10.014719366571425
       Centrumindex 1:
              26 - 54.156682027649765 = -28.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 792.9246533160608
       Euclidische afstand: 28.15891782927854
```

Centrumindex 2:

```
26 - 31.63235294117647 = -5.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 31.88497212610535
       Euclidische afstand: 5.646677972587542
  _____
{0: 10.014719366571425, 1: 28.15891782927854, 2: 5.646677972587542}
-------
Afstand van bronindex 313 tot...
       Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 144.32467917915065
       Euclidische afstand: 12.013520682096097
        ._____
       Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 684.2979252054618
      Euclidische afstand: 26.1590887686376
       Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 13.355560361399464
       Euclidische afstand: 3.6545260104970474
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
_____
Afstand van bronindex 314 tot...
       Centrumindex 0:
              43 - 15.992481203007529 = 27.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 729.5502430889247
      Euclidische afstand: 27.010187764784693
       Centrumindex 1:
              43 - 54.156682027649765 = -11.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 124.59746437596881
      Euclidische afstand: 11.162323430897745
       .____
       Centrumindex 2:
              43 - 31.63235294117647 = 11.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 129.38497212610534
```

Euclidische afstand: 11.374751519312646

```
{0: 27.010187764784693, 1: 11.162323430897745, 2: 11.374751519312646}
_____
Afstand van bronindex 315 tot...
      Centrumindex 0:
             26 - 15.992481203007529 = 10.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 100.53520549494016
      Euclidische afstand: 10.026724564629276
          -----
      Centrumindex 1:
             26 - 54.156682027649765 = -28.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 793.2149758967059
      Euclidische afstand: 28.164072430966122
  _____
      Centrumindex 2:
             26 - 31.63235294117647 = -5.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 32.081050557477894
      Euclidische afstand: 5.66401364382872
  _____
{0: 10.026724564629276, 1: 28.164072430966122, 2: 5.66401364382872}
Afstand van bronindex 316 tot...
      Centrumindex 0:
             24 - 15.992481203007529 = 8.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 64.50513030697027
      Euclidische afstand: 8.031508594714337
      Centrumindex 1:
             24 - 54.156682027649765 = -30.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 909.841704007305
      Euclidische afstand: 30.163582413355762
      Centrumindex 2:
             24 - 31.63235294117647 = -7.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 58.61046232218378
      Euclidische afstand: 7.655747012681635
   _____
{0: 8.031508594714337, 1: 30.163582413355762, 2: 7.655747012681635}
```

```
Afstand van bronindex 317 tot...
       Centrumindex 0:
               54 - 15.992481203007529 = 38.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1444.715656622759
       Euclidische afstand: 38.009415368073725
       Centrumindex 1:
               54 - 54.156682027649765 = -0.15668202764976513
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 0.15045976767397765
       Euclidische afstand: 0.38789143800034775
       Centrumindex 2:
               54 - 31.63235294117647 = 22.36764705882353
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 500.473207420223
       Euclidische afstand: 22.371258512212115
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
    _____
Afstand van bronindex 318 tot...
       Centrumindex 0:
               31 - 15.992481203007529 = 15.007518796992471
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 225.61039346486487
       Euclidische afstand: 15.020332668248892
        _____
       Centrumindex 1:
               31 - 54.156682027649765 = -23.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 536.6481556202083
       Euclidische afstand: 23.165667605752446
       Centrumindex 2:
               31 - 31.63235294117647 = -0.632352941176471
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 0.7575211457131878
       Euclidische afstand: 0.8703569070865055
{0: 15.020332668248892, 1: 23.165667605752446, 2: 0.8703569070865055}
______
Afstand van bronindex 319 tot...
       Centrumindex 0:
               40 - 15.992481203007529 = 24.00751879699247
```

1 - 0.3796992481203007 = 0.6203007518796992

```
Totale euclidische som: 576.7457318107294
      Euclidische afstand: 24.015531054105995
      Centrumindex 1:
              40 - 54.156682027649765 = -14.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 200.82787912251257
      Euclidische afstand: 14.171375343364263
  -----
      Centrumindex 2:
              40 - 31.63235294117647 = 8.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 70.3751682045367
      Euclidische afstand: 8.38899089310131
  _____
{0: 24.015531054105995, 1: 14.171375343364263, 2: 8.38899089310131}
_____
Afstand van bronindex 320 tot...
      Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 36.234453615240994
      Euclidische afstand: 6.0195060939616125
 ._____
       Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1034.178109537259
      Euclidische afstand: 32.15863973393867
 ._____
       Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 92.94379565551712
      Euclidische afstand: 9.640736261070371
{0: 6.0195060939616125, 1: 32.15863973393867, 2: 9.640736261070371}
Afstand van bronindex 321 tot...
      Centrumindex 0:
              27 - 15.992481203007529 = 11.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 121.30964158516569
      Euclidische afstand: 11.014065624698524
```

Centrumindex 1:

```
27 - 54.156682027649765 = -27.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 737.6112892607613
      Euclidische afstand: 27.159000152081468
         -----
      Centrumindex 2:
             27 - 31.63235294117647 = -4.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 21.620266243752408
      Euclidische afstand: 4.649759804952553
  _____
{0: 11.014065624698524, 1: 27.159000152081468, 2: 4.649759804952553}
______
Afstand van bronindex 322 tot...
      Centrumindex 0:
             30 - 15.992481203007529 = 14.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 196.59535587087993
      Euclidische afstand: 14.021246587621228
         ._____
      Centrumindex 1:
             30 - 54.156682027649765 = -24.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 583.9615196755078
      Euclidische afstand: 24.16529577049509
_____
      Centrumindex 2:
             30 - 31.63235294117647 = -1.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 3.02222702806613
      Euclidische afstand: 1.738455356937914
 -----
{0: 14.021246587621228, 1: 24.16529577049509, 2: 1.738455356937914}
  -----
Afstand van bronindex 323 tot...
      Centrumindex 0:
             22 - 15.992481203007529 = 6.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 36.47505511900039
      Euclidische afstand: 6.039458180913283
       .____
      Centrumindex 1:
             22 - 54.156682027649765 = -32.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1034.4684321179043
```

Euclidische afstand: 32.16315332982611

```
Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 93.13987408688966
       Euclidische afstand: 9.650900169771194
{0: 6.039458180913283, 1: 32.16315332982611, 2: 9.650900169771194}
Afstand van bronindex 324 tot...
       Centrumindex 0:
              86 - 15.992481203007529 = 70.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 4901.196859630278
       Euclidische afstand: 70.00854847538461
       Centrumindex 1:
              86 - 54.156682027649765 = 31.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1014.122809998089
       Euclidische afstand: 31.845294942865404
 _____
       Centrumindex 2:
              86 - 31.63235294117647 = 54.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2956.002619184929
       Euclidische afstand: 54.36913296333618
{0: 70.00854847538461, 1: 31.845294942865404, 2: 54.36913296333618}
_____
Afstand van bronindex 325 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 400.6855814347896
       Euclidische afstand: 20.017132198064477
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 330.0813353437107
       Euclidische afstand: 18.168140668315807
 ._____
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
```

1 - 0.4019607843137254 = 0.5980392156862746

```
Totale euclidische som: 19.433991733948478
      Euclidische afstand: 4.408400133149041
{0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
_____
Afstand van bronindex 326 tot...
      Centrumindex 0:
              61 - 15.992481203007529 = 45.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 2025.8209197806536
      Euclidische afstand: 45.009120406653736
 _____
      Centrumindex 1:
              61 - 54.156682027649765 = 6.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 46.95691138057727
      Euclidische afstand: 6.852511319259332
      Centrumindex 2:
              61 - 31.63235294117647 = 29.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 862.6202662437523
      Euclidische afstand: 29.37039778831319
  ._____
{0: 45.009120406653736, 1: 6.852511319259332, 2: 29.37039778831319}
_____
Afstand van bronindex 327 tot...
      Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 400.6855814347896
      Euclidische afstand: 20.017132198064477
      Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 330.0813353437107
      Euclidische afstand: 18.168140668315807
      Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 19.433991733948478
      Euclidische afstand: 4.408400133149041
  {0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
```

```
_____
Afstand van bronindex 328 tot...
      Centrumindex 0:
             31 - 15.992481203007529 = 15.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 225.61039346486487
      Euclidische afstand: 15.020332668248892
  _____
      Centrumindex 1:
             31 - 54.156682027649765 = -23.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 536.6481556202083
      Euclidische afstand: 23.165667605752446
  _____
      Centrumindex 2:
             31 - 31.63235294117647 = -0.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 0.7575211457131878
      Euclidische afstand: 0.8703569070865055
{0: 15.020332668248892, 1: 23.165667605752446, 2: 0.8703569070865055}
Afstand van bronindex 329 tot...
      Centrumindex 0:
             16 - 15.992481203007529 = 0.007518796992471266
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 0.3848295550907342
      Euclidische afstand: 0.6203463186726703
 _____
      Centrumindex 1:
             16 - 54.156682027649765 = -38.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1456.3486164497015
      Euclidische afstand: 38.162135899995185
      Centrumindex 2:
             16 - 31.63235294117647 = -15.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 244.72810938100733
      Euclidische afstand: 15.643788204300368
  _____
{0: 0.6203463186726703, 1: 38.162135899995185, 2: 15.643788204300368}
_____
Afstand van bronindex 330 tot...
```

Centrumindex 0:

```
86 - 15.992481203007529 = 70.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 4901.437461134037
       Euclidische afstand: 70.01026682661649
          -----
       Centrumindex 1:
              86 - 54.156682027649765 = 31.843317972350235
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1014.4131325787341
       Euclidische afstand: 31.849852944381613
       _____
       Centrumindex 2:
              86 - 31.63235294117647 = 54.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 2956.1986976163016
       Euclidische afstand: 54.37093614805893
   _____
{0: 70.01026682661649, 1: 31.849852944381613, 2: 54.37093614805893}
Afstand van bronindex 331 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 841.5803182768947
       Euclidische afstand: 29.010003762097217
 _____
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 83.97073626536975
       Euclidische afstand: 9.16355478323613
       Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 178.85556036139945
       Euclidische afstand: 13.373689108148113
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
_____
Afstand van bronindex 332 tot...
       Centrumindex 0:
              38 - 15.992481203007529 = 22.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 484.4750551190001
```

Euclidische afstand: 22.010794059256476

```
Centrumindex 1:
              38 - 54.156682027649765 = -16.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 261.1642846524665
       Euclidische afstand: 16.160578103906634
       Centrumindex 2:
              38 - 31.63235294117647 = 6.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 40.70850153787004
       Euclidische afstand: 6.380321429040237
{0: 22.010794059256476, 1: 16.160578103906634, 2: 6.380321429040237}
  -----
Afstand van bronindex 333 tot...
       Centrumindex 0:
              16 - 15.992481203007529 = 0.007518796992471266
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 0.14422805133133568
       Euclidische afstand: 0.3797736843586397
 ______
       Centrumindex 1:
              16 - 54.156682027649765 = -38.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1456.0582938690561
       Euclidische afstand: 38.15833190626991
        _____
       Centrumindex 2:
              16 - 31.63235294117647 = -15.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 244.53203094963476
       Euclidische afstand: 15.637519974396028
{0: 0.3797736843586397, 1: 38.15833190626991, 2: 15.637519974396028}
_____
Afstand van bronindex 334 tot...
       Centrumindex 0:
              54 - 15.992481203007529 = 38.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1444.9562581265186
       Euclidische afstand: 38.0125802613624
 _____
       Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
```

1 - 0.3548387096774193 = 0.6451612903225807

```
Totale euclidische som: 0.44078234831913904
       Euclidische afstand: 0.6639144133991512
       Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 500.66928585159553
       Euclidische afstand: 22.3756404567913
     -----
{0: 38.0125802613624, 1: 0.6639144133991512, 2: 22.3756404567913}
_____
Afstand van bronindex 335 tot...
       Centrumindex 0:
              54 - 15.992481203007529 = 38.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1444.715656622759
       Euclidische afstand: 38.009415368073725
       Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 0.15045976767397765
       Euclidische afstand: 0.38789143800034775
 ._____
       Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 500.473207420223
       Euclidische afstand: 22.371258512212115
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
1
_____
Afstand van bronindex 336 tot...
       Centrumindex 0:
              29 - 15.992481203007529 = 13.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 169.3397167731356
       Euclidische afstand: 13.013059470129829
       Centrumindex 1:
              29 - 54.156682027649765 = -25.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 632.9845611501622
       Euclidische afstand: 25.15918442935228
```

Centrumindex 2:

```
29 - 31.63235294117647 = -2.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 7.090854479046523
      Euclidische afstand: 2.662865839475681
  _____
{0: 13.013059470129829, 1: 25.15918442935228, 2: 2.662865839475681}
-------
Afstand van bronindex 337 tot...
      Centrumindex 0:
             41 - 15.992481203007529 = 25.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 625.7607694047143
      Euclidische afstand: 25.015210760749437
       -----
      Centrumindex 1:
             41 - 54.156682027649765 = -13.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 173.51451506721304
      Euclidische afstand: 13.172490845212725
          -----
      Centrumindex 2:
             41 - 31.63235294117647 = 9.367647058823529
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 88.11046232218376
      Euclidische afstand: 9.38671733473336
 _____
{0: 25.015210760749437, 1: 13.172490845212725, 2: 9.38671733473336}
_____
Afstand van bronindex 338 tot...
      Centrumindex 0:
             45 - 15.992481203007529 = 29.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 841.8209197806541
      Euclidische afstand: 29.0141503370451
      Centrumindex 1:
             45 - 54.156682027649765 = -9.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 84.2610588460149
      Euclidische afstand: 9.179382269304122
       .____
      Centrumindex 2:
             45 - 31.63235294117647 = 13.367647058823529
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 179.05163879277202
```

Euclidische afstand: 13.381017853391125

```
\{0: 29.0141503370451, 1: 9.179382269304122, 2: 13.381017853391125\}
_____
Afstand van bronindex 339 tot...
      Centrumindex 0:
             45 - 15.992481203007529 = 29.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 841.5803182768947
      Euclidische afstand: 29.010003762097217
          ._____
      Centrumindex 1:
             45 - 54.156682027649765 = -9.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 83.97073626536975
      Euclidische afstand: 9.16355478323613
 ______
      Centrumindex 2:
             45 - 31.63235294117647 = 13.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 178.85556036139945
      Euclidische afstand: 13.373689108148113
   _____
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
Afstand van bronindex 340 tot...
      Centrumindex 0:
             2 - 15.992481203007529 = -13.992481203007529
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 196.17430323930154
      Euclidische afstand: 14.006223732302063
      Centrumindex 1:
             2 - 54.156682027649765 = -52.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 2720.7357132238944
      Euclidische afstand: 52.16067209329165
      Centrumindex 2:
             2 - 31.63235294117647 = -29.63235294117647
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 878.4339917339486
      Euclidische afstand: 29.638387131116776
    _____
{0: 14.006223732302063, 1: 52.16067209329165, 2: 29.638387131116776}
```

```
Afstand van bronindex 341 tot...
       Centrumindex 0:
               24 - 15.992481203007529 = 8.007518796992471
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 64.50513030697027
       Euclidische afstand: 8.031508594714337
       Centrumindex 1:
               24 - 54.156682027649765 = -30.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 909.841704007305
       Euclidische afstand: 30.163582413355762
       Centrumindex 2:
               24 - 31.63235294117647 = -7.632352941176471
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 58.61046232218378
       Euclidische afstand: 7.655747012681635
{0: 8.031508594714337, 1: 30.163582413355762, 2: 7.655747012681635}
    _____
Afstand van bronindex 342 tot...
       Centrumindex 0:
               28 - 15.992481203007529 = 12.007518796992471
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 144.32467917915065
       Euclidische afstand: 12.013520682096097
        _____
       Centrumindex 1:
               28 - 54.156682027649765 = -26.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 684.2979252054618
       Euclidische afstand: 26.1590887686376
       Centrumindex 2:
               28 - 31.63235294117647 = -3.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 13.355560361399464
       Euclidische afstand: 3.6545260104970474
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
______
Afstand van bronindex 343 tot...
       Centrumindex 0:
               25 - 15.992481203007529 = 9.007518796992471
```

0 - 0.3796992481203007 = -0.3796992481203007

```
Totale euclidische som: 81.27956639719581
       Euclidische afstand: 9.01551808811872
       Centrumindex 1:
              25 - 54.156682027649765 = -29.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 850.2380173713603
       Euclidische afstand: 29.158841152750917
   _____
       Centrumindex 2:
              25 - 31.63235294117647 = -6.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 44.14967800845829
       Euclidische afstand: 6.644522406347825
  -----
{0: 9.01551808811872, 1: 29.158841152750917, 2: 6.644522406347825}
_____
Afstand van bronindex 344 tot...
      Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 400.4449799310302
       Euclidische afstand: 20.011121406133896
 ._____
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 329.79101276306557
       Euclidische afstand: 18.160149029208586
 ._____
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 19.23791330257593
       Euclidische afstand: 4.386104570410506
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
Afstand van bronindex 345 tot...
       Centrumindex 0:
              24 - 15.992481203007529 = 8.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 64.50513030697027
       Euclidische afstand: 8.031508594714337
```

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Centrumindex 1:

```
24 - 54.156682027649765 = -30.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 909.841704007305
      Euclidische afstand: 30.163582413355762
         -----
      Centrumindex 2:
             24 - 31.63235294117647 = -7.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 58.61046232218378
      Euclidische afstand: 7.655747012681635
 _____
{0: 8.031508594714337, 1: 30.163582413355762, 2: 7.655747012681635}
______
Afstand van bronindex 346 tot...
      Centrumindex 0:
             40 - 15.992481203007529 = 24.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 576.7457318107294
      Euclidische afstand: 24.015531054105995
         -----
      Centrumindex 1:
             40 - 54.156682027649765 = -14.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 200.82787912251257
      Euclidische afstand: 14.171375343364263
      Centrumindex 2:
             40 - 31.63235294117647 = 8.367647058823529
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 70.3751682045367
      Euclidische afstand: 8.38899089310131
  _____
{0: 24.015531054105995, 1: 14.171375343364263, 2: 8.38899089310131}
  _____
Afstand van bronindex 347 tot...
      Centrumindex 0:
             54 - 15.992481203007529 = 38.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1444.9562581265186
      Euclidische afstand: 38.0125802613624
       .____
      Centrumindex 1:
             54 - 54.156682027649765 = -0.15668202764976513
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 0.44078234831913904
```

Euclidische afstand: 0.6639144133991512

```
Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 500.66928585159553
       Euclidische afstand: 22.3756404567913
{0: 38.0125802613624, 1: 0.6639144133991512, 2: 22.3756404567913}
Afstand van bronindex 348 tot...
       Centrumindex 0:
              3 - 15.992481203007529 = -12.992481203007529
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 169.18934083328648
       Euclidische afstand: 13.007280301173127
       Centrumindex 1:
              3 - 54.156682027649765 = -51.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 2617.4223491685952
       Euclidische afstand: 51.16075008410838
 _____
       Centrumindex 2:
              3 - 31.63235294117647 = -28.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 820.1692858515955
       Euclidische afstand: 28.638597833196993
{0: 13.007280301173127, 1: 51.16075008410838, 2: 28.638597833196993}
_____
Afstand van bronindex 349 tot...
       Centrumindex 0:
              42 - 15.992481203007529 = 26.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 676.5352054949398
       Euclidische afstand: 26.010290376982333
       Centrumindex 1:
              42 - 54.156682027649765 = -12.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 147.91082843126833
       Euclidische afstand: 12.161859579491466
 ._____
       Centrumindex 2:
              42 - 31.63235294117647 = 10.367647058823529
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 107.64967800845828
       Euclidische afstand: 10.375436280391215
{0: 26.010290376982333, 1: 12.161859579491466, 2: 10.375436280391215}
_____
Afstand van bronindex 350 tot...
       Centrumindex 0:
              23 - 15.992481203007529 = 7.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 49.24949120922594
       Euclidische afstand: 7.017798173873764
 _____
       Centrumindex 1:
              23 - 54.156682027649765 = -31.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 970.8647454819594
       Euclidische afstand: 31.158702564162702
       Centrumindex 2:
              23 - 31.63235294117647 = -8.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 74.67908977316418
       Euclidische afstand: 8.641706415585071
   _____
{0: 7.017798173873764, 1: 31.158702564162702, 2: 8.641706415585071}
_____
Afstand van bronindex 351 tot...
       Centrumindex 0:
              54 - 15.992481203007529 = 38.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1444.715656622759
      Euclidische afstand: 38.009415368073725
       Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 0.15045976767397765
       Euclidische afstand: 0.38789143800034775
       Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 500.473207420223
       Euclidische afstand: 22.371258512212115
  .....
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
```

```
Afstand van bronindex 352 tot...
       Centrumindex 0:
              15 - 15.992481203007529 = -0.9924812030075287
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1.1291904573463931
       Euclidische afstand: 1.0626337362169493
       Centrumindex 1:
              15 - 54.156682027649765 = -39.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1533.3716579243555
       Euclidische afstand: 39.15828977272061
       _____
       Centrumindex 2:
              15 - 31.63235294117647 = -16.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 276.79673683198774
       Euclidische afstand: 16.63720940638747
{0: 1.0626337362169493, 1: 39.15828977272061, 2: 16.63720940638747}
Afstand van bronindex 353 tot...
       Centrumindex 0:
              25 - 15.992481203007529 = 9.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 81.27956639719581
       Euclidische afstand: 9.01551808811872
 _____
       Centrumindex 1:
              25 - 54.156682027649765 = -29.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 850.2380173713603
       Euclidische afstand: 29.158841152750917
       Centrumindex 2:
              25 - 31.63235294117647 = -6.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 44.14967800845829
       Euclidische afstand: 6.644522406347825
 _____
{0: 9.01551808811872, 1: 29.158841152750917, 2: 6.644522406347825}
_____
Afstand van bronindex 354 tot...
```

Centrumindex 0:

```
54 - 15.992481203007529 = 38.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1444.715656622759
       Euclidische afstand: 38.009415368073725
          -----
       Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 0.15045976767397765
       Euclidische afstand: 0.38789143800034775
 _____
       Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 500.473207420223
       Euclidische afstand: 22.371258512212115
   _____
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
Afstand van bronindex 355 tot...
       Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 144.32467917915065
       Euclidische afstand: 12.013520682096097
 _____
       Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 684.2979252054618
       Euclidische afstand: 26.1590887686376
       Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 13.355560361399464
       Euclidische afstand: 3.6545260104970474
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
_____
Afstand van bronindex 356 tot...
       Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 36.47505511900039
```

Euclidische afstand: 6.039458180913283

```
Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1034.4684321179043
       Euclidische afstand: 32.16315332982611
       Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 93.13987408688966
       Euclidische afstand: 9.650900169771194
{0: 6.039458180913283, 1: 32.16315332982611, 2: 9.650900169771194}
   -----
Afstand van bronindex 357 tot...
       Centrumindex 0:
              38 - 15.992481203007529 = 22.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 484.4750551190001
       Euclidische afstand: 22.010794059256476
 _____
       Centrumindex 1:
              38 - 54.156682027649765 = -16.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 261.1642846524665
       Euclidische afstand: 16.160578103906634
        ______
       Centrumindex 2:
              38 - 31.63235294117647 = 6.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 40.70850153787004
       Euclidische afstand: 6.380321429040237
{0: 22.010794059256476, 1: 16.160578103906634, 2: 6.380321429040237}
_____
Afstand van bronindex 358 tot...
       Centrumindex 0:
              54 - 15.992481203007529 = 38.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1444.9562581265186
       Euclidische afstand: 38.0125802613624
 ._____
       Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
```

1 - 0.3548387096774193 = 0.6451612903225807

```
Totale euclidische som: 0.44078234831913904
       Euclidische afstand: 0.6639144133991512
      Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 500.66928585159553
      Euclidische afstand: 22.3756404567913
    -----
{0: 38.0125802613624, 1: 0.6639144133991512, 2: 22.3756404567913}
_____
Afstand van bronindex 359 tot...
      Centrumindex 0:
              54 - 15.992481203007529 = 38.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1444.9562581265186
      Euclidische afstand: 38.0125802613624
      Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 0.44078234831913904
      Euclidische afstand: 0.6639144133991512
 ._____
       Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 500.66928585159553
       Euclidische afstand: 22.3756404567913
   _____
{0: 38.0125802613624, 1: 0.6639144133991512, 2: 22.3756404567913}
1
_____
Afstand van bronindex 360 tot...
      Centrumindex 0:
              40 - 15.992481203007529 = 24.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 576.5051303069699
      Euclidische afstand: 24.01052124188415
      Centrumindex 1:
              40 - 54.156682027649765 = -14.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 200.5375565418674
      Euclidische afstand: 14.161128364006428
```

Centrumindex 2:

```
40 - 31.63235294117647 = 8.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 70.17908977316416
      Euclidische afstand: 8.377296089620097
  _____
{0: 24.01052124188415, 1: 14.161128364006428, 2: 8.377296089620097}
------
Afstand van bronindex 361 tot...
      Centrumindex 0:
              29 - 15.992481203007529 = 13.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 169.3397167731356
      Euclidische afstand: 13.013059470129829
       -----
      Centrumindex 1:
              29 - 54.156682027649765 = -25.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 632.9845611501622
      Euclidische afstand: 25.15918442935228
       Centrumindex 2:
              29 - 31.63235294117647 = -2.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 7.090854479046523
      Euclidische afstand: 2.662865839475681
 _____
{0: 13.013059470129829, 1: 25.15918442935228, 2: 2.662865839475681}
_____
Afstand van bronindex 362 tot...
      Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 841.5803182768947
      Euclidische afstand: 29.010003762097217
      Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 83.97073626536975
      Euclidische afstand: 9.16355478323613
       .____
      Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 178.85556036139945
```

Euclidische afstand: 13.373689108148113

```
\{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113\}
_____
Afstand van bronindex 363 tot...
      Centrumindex 0:
             35 - 15.992481203007529 = 19.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 361.42994233704525
      Euclidische afstand: 19.01131090527545
          ._____
      Centrumindex 1:
             35 - 54.156682027649765 = -19.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 367.1043768183651
      Euclidische afstand: 19.15996807978461
 ______
      Centrumindex 2:
             35 - 31.63235294117647 = 3.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 11.50261918492887
      Euclidische afstand: 3.391551147326083
  _____
{0: 19.01131090527545, 1: 19.15996807978461, 2: 3.391551147326083}
Afstand van bronindex 364 tot...
      Centrumindex 0:
             54 - 15.992481203007529 = 38.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1444.715656622759
      Euclidische afstand: 38.009415368073725
      Centrumindex 1:
             54 - 54.156682027649765 = -0.15668202764976513
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 0.15045976767397765
      Euclidische afstand: 0.38789143800034775
      Centrumindex 2:
             54 - 31.63235294117647 = 22.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 500.473207420223
      Euclidische afstand: 22.371258512212115
    ._____
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
_____
```

```
Afstand van bronindex 365 tot...
       Centrumindex 0:
               30 - 15.992481203007529 = 14.007518796992471
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 196.35475436712053
       Euclidische afstand: 14.012664071015209
       Centrumindex 1:
               30 - 54.156682027649765 = -24.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 583.6711970948627
       Euclidische afstand: 24.159288008856194
       Centrumindex 2:
               30 - 31.63235294117647 = -1.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.8261485966935807
       Euclidische afstand: 1.681115283582176
{0: 14.012664071015209, 1: 24.159288008856194, 2: 1.681115283582176}
    _____
Afstand van bronindex 366 tot...
       Centrumindex 0:
               60 - 15.992481203007529 = 44.00751879699247
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1937.0464836904282
       Euclidische afstand: 44.01189025354885
        _____
       Centrumindex 1:
               60 - 54.156682027649765 = 5.843317972350235
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 34.56059801652196
       Euclidische afstand: 5.878826244797677
       Centrumindex 2:
               60 - 31.63235294117647 = 28.36764705882353
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 805.0810505574779
       Euclidische afstand: 28.3739502106682
{0: 44.01189025354885, 1: 5.878826244797677, 2: 28.3739502106682}
______
Afstand van bronindex 367 tot...
       Centrumindex 0:
               54 - 15.992481203007529 = 38.00751879699247
```

1 - 0.3796992481203007 = 0.6203007518796992

```
Totale euclidische som: 1444.9562581265186
      Euclidische afstand: 38.0125802613624
      Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 0.44078234831913904
      Euclidische afstand: 0.6639144133991512
  -----
      Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 500.66928585159553
      Euclidische afstand: 22.3756404567913
  _____
{0: 38.0125802613624, 1: 0.6639144133991512, 2: 22.3756404567913}
_____
Afstand van bronindex 368 tot...
      Centrumindex 0:
             54 - 15.992481203007529 = 38.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1444.9562581265186
      Euclidische afstand: 38.0125802613624
 ._____
       Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 0.44078234831913904
      Euclidische afstand: 0.6639144133991512
 ______
       Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 500.66928585159553
      Euclidische afstand: 22.3756404567913
{0: 38.0125802613624, 1: 0.6639144133991512, 2: 22.3756404567913}
Afstand van bronindex 369 tot...
      Centrumindex 0:
              24 - 15.992481203007529 = 8.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 64.50513030697027
      Euclidische afstand: 8.031508594714337
```

Centrumindex 1:

```
24 - 54.156682027649765 = -30.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 909.841704007305
      Euclidische afstand: 30.163582413355762
          ._____
      Centrumindex 2:
             24 - 31.63235294117647 = -7.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 58.61046232218378
      Euclidische afstand: 7.655747012681635
  ______
{0: 8.031508594714337, 1: 30.163582413355762, 2: 7.655747012681635}
______
Afstand van bronindex 370 tot...
      Centrumindex 0:
             25 - 15.992481203007529 = 9.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 81.52016790095522
      Euclidische afstand: 9.028851970264837
          ._____
      Centrumindex 1:
             25 - 54.156682027649765 = -29.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 850.5283399520055
      Euclidische afstand: 29.1638190220692
      Centrumindex 2:
             25 - 31.63235294117647 = -6.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 44.345756439830836
      Euclidische afstand: 6.659260952976001
 _____
{0: 9.028851970264837, 1: 29.1638190220692, 2: 6.659260952976001}
  _____
Afstand van bronindex 371 tot...
      Centrumindex 0:
             18 - 15.992481203007529 = 2.0075187969924713
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 4.174303239301221
      Euclidische afstand: 2.0431111666527646
       ._____
      Centrumindex 1:
             18 - 54.156682027649765 = -36.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1307.431565758457
```

Euclidische afstand: 36.15842316471305

```
Centrumindex 2:
              18 - 31.63235294117647 = -13.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 186.00261918492888
       Euclidische afstand: 13.638277720626196
{0: 2.0431111666527646, 1: 36.15842316471305, 2: 13.638277720626196}
Afstand van bronindex 372 tot...
       Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 9.189340833286163
       Euclidische afstand: 3.031392556777522
       Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1236.1182017031574
       Euclidische afstand: 35.15847268729342
 _____
       Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 159.73791330257595
       Euclidische afstand: 12.638746508359757
{0: 3.031392556777522, 1: 35.15847268729342, 2: 12.638746508359757}
_____
Afstand van bronindex 373 tot...
       Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 36.234453615240994
       Euclidische afstand: 6.0195060939616125
       Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1034.178109537259
       Euclidische afstand: 32.15863973393867
 _____
       Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 92.94379565551712
      Euclidische afstand: 9.640736261070371
{0: 6.0195060939616125, 1: 32.15863973393867, 2: 9.640736261070371}
-----
Afstand van bronindex 374 tot...
      Centrumindex 0:
              3 - 15.992481203007529 = -12.992481203007529
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 168.9487393295271
      Euclidische afstand: 12.998028286225841
 _____
      Centrumindex 1:
              3 - 54.156682027649765 = -51.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 2617.1320265879503
      Euclidische afstand: 51.15791264885571
      Centrumindex 2:
              3 - 31.63235294117647 = -28.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 819.9732074202229
      Euclidische afstand: 28.63517430399583
  -----
{0: 12.998028286225841, 1: 51.15791264885571, 2: 28.63517430399583}
_____
Afstand van bronindex 375 tot...
      Centrumindex 0:
              54 - 15.992481203007529 = 38.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1444.9562581265186
      Euclidische afstand: 38.0125802613624
      Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 0.44078234831913904
      Euclidische afstand: 0.6639144133991512
      Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 500.66928585159553
      Euclidische afstand: 22.3756404567913
```

{0: 38.0125802613624, 1: 0.6639144133991512, 2: 22.3756404567913}

```
_____
Afstand van bronindex 376 tot...
      Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 36.47505511900039
      Euclidische afstand: 6.039458180913283
   -----
      Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1034.4684321179043
      Euclidische afstand: 32.16315332982611
       ______
      Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 93.13987408688966
      Euclidische afstand: 9.650900169771194
{0: 6.039458180913283, 1: 32.16315332982611, 2: 9.650900169771194}
Afstand van bronindex 377 tot...
       Centrumindex 0:
              27 - 15.992481203007529 = 11.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 121.30964158516569
      Euclidische afstand: 11.014065624698524
       Centrumindex 1:
              27 - 54.156682027649765 = -27.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 737.6112892607613
      Euclidische afstand: 27.159000152081468
      Centrumindex 2:
              27 - 31.63235294117647 = -4.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 21.620266243752408
      Euclidische afstand: 4.649759804952553
 _____
{0: 11.014065624698524, 1: 27.159000152081468, 2: 4.649759804952553}
_____
Afstand van bronindex 378 tot...
      Centrumindex 0:
```

```
20 - 15.992481203007529 = 4.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 16.204378427271106
       Euclidische afstand: 4.025466237253904
          -----
       Centrumindex 1:
              20 - 54.156682027649765 = -34.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1166.804837647858
       Euclidische afstand: 34.158525109375816
       _____
       Centrumindex 2:
              20 - 31.63235294117647 = -11.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 135.473207420223
       Euclidische afstand: 11.639295830084524
    -----
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
Afstand van bronindex 379 tot...
       Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 9.189340833286163
       Euclidische afstand: 3.031392556777522
       Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1236.1182017031574
       Euclidische afstand: 35.15847268729342
       Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 159.73791330257595
       Euclidische afstand: 12.638746508359757
{0: 3.031392556777522, 1: 35.15847268729342, 2: 12.638746508359757}
_____
Afstand van bronindex 380 tot...
       Centrumindex 0:
              42 - 15.992481203007529 = 26.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 676.7758069986992
```

Euclidische afstand: 26.01491508728597

```
Centrumindex 1:
              42 - 54.156682027649765 = -12.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 148.2011510119135
       Euclidische afstand: 12.173789509101654
       Centrumindex 2:
              42 - 31.63235294117647 = 10.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 107.84575643983082
       Euclidische afstand: 10.38488114712108
{0: 26.01491508728597, 1: 12.173789509101654, 2: 10.38488114712108}
  _____
Afstand van bronindex 381 tot...
       Centrumindex 0:
              1 - 15.992481203007529 = -14.992481203007529
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 225.1592656453166
       Euclidische afstand: 15.00530791571158
 _____
       Centrumindex 1:
              1 - 54.156682027649765 = -53.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 2826.049077279194
       Euclidische afstand: 53.16059703651939
        ______
       Centrumindex 2:
              1 - 31.63235294117647 = -30.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 938.6986976163015
       Euclidische afstand: 30.63819018180254
{0: 15.00530791571158, 1: 53.16059703651939, 2: 30.63819018180254}
_____
Afstand van bronindex 382 tot...
       Centrumindex 0:
              32 - 15.992481203007529 = 16.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 256.38482955509045
       Euclidische afstand: 16.01202140752661
 _____
       Centrumindex 1:
              32 - 54.156682027649765 = -22.156682027649765
```

0 - 0.3548387096774193 = -0.3548387096774193

```
Totale euclidische som: 491.0444689842637
       Euclidische afstand: 22.15952321202475
      Centrumindex 2:
              32 - 31.63235294117647 = 0.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 0.2967368319876966
      Euclidische afstand: 0.5447355615229252
     -----
{0: 16.01202140752661, 1: 22.15952321202475, 2: 0.5447355615229252}
_____
Afstand van bronindex 383 tot...
      Centrumindex 0:
              35 - 15.992481203007529 = 19.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 361.6705438408046
      Euclidische afstand: 19.017637704005317
      Centrumindex 1:
              35 - 54.156682027649765 = -19.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 367.3946993990102
      Euclidische afstand: 19.16754286284526
 ._____
       Centrumindex 2:
              35 - 31.63235294117647 = 3.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 11.69869761630142
       Euclidische afstand: 3.420335892321311
   -----
{0: 19.017637704005317, 1: 19.16754286284526, 2: 3.420335892321311}
_____
Afstand van bronindex 384 tot...
      Centrumindex 0:
              54 - 15.992481203007529 = 38.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1444.715656622759
      Euclidische afstand: 38.009415368073725
      Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 0.15045976767397765
      Euclidische afstand: 0.38789143800034775
```

Centrumindex 2:

```
54 - 31.63235294117647 = 22.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 500.473207420223
      Euclidische afstand: 22.371258512212115
  _____
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
-------
Afstand van bronindex 385 tot...
      Centrumindex 0:
             18 - 15.992481203007529 = 2.0075187969924713
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 4.174303239301221
      Euclidische afstand: 2.0431111666527646
       -----
      Centrumindex 1:
             18 - 54.156682027649765 = -36.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1307.431565758457
      Euclidische afstand: 36.15842316471305
          ._____
      Centrumindex 2:
             18 - 31.63235294117647 = -13.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 186.00261918492888
      Euclidische afstand: 13.638277720626196
 -----
{0: 2.0431111666527646, 1: 36.15842316471305, 2: 13.638277720626196}
_____
Afstand van bronindex 386 tot...
      Centrumindex 0:
             1 - 15.992481203007529 = -14.992481203007529
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 224.9186641415572
      Euclidische afstand: 14.99728855965495
      Centrumindex 1:
             1 - 54.156682027649765 = -53.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 2825.758754698549
      Euclidische afstand: 53.15786634825131
       .____
      Centrumindex 2:
             1 - 31.63235294117647 = -30.63235294117647
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 938.5026191849289
```

Euclidische afstand: 30.634990112368715

```
{0: 14.99728855965495, 1: 53.15786634825131, 2: 30.634990112368715}
_____
Afstand van bronindex 387 tot...
      Centrumindex 0:
             36 - 15.992481203007529 = 20.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 400.6855814347896
      Euclidische afstand: 20.017132198064477
          _____
      Centrumindex 1:
             36 - 54.156682027649765 = -18.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 330.0813353437107
      Euclidische afstand: 18.168140668315807
 ______
      Centrumindex 2:
             36 - 31.63235294117647 = 4.367647058823529
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 19.433991733948478
      Euclidische afstand: 4.408400133149041
  ._____
{0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
Afstand van bronindex 388 tot...
      Centrumindex 0:
             54 - 15.992481203007529 = 38.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1444.715656622759
      Euclidische afstand: 38.009415368073725
      Centrumindex 1:
             54 - 54.156682027649765 = -0.15668202764976513
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 0.15045976767397765
      Euclidische afstand: 0.38789143800034775
      Centrumindex 2:
             54 - 31.63235294117647 = 22.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 500.473207420223
      Euclidische afstand: 22.371258512212115
    -----
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
```

\_\_\_\_\_

```
Afstand van bronindex 389 tot...
       Centrumindex 0:
               17 - 15.992481203007529 = 1.0075187969924713
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1.3998671490756767
       Euclidische afstand: 1.183159815526067
       Centrumindex 1:
               17 - 54.156682027649765 = -37.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1381.0352523944018
       Euclidische afstand: 37.16228265855586
       Centrumindex 2:
               17 - 31.63235294117647 = -14.632352941176471
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 214.4634034986544
       Euclidische afstand: 14.644569078626192
{0: 1.183159815526067, 1: 37.16228265855586, 2: 14.644569078626192}
    -----
Afstand van bronindex 390 tot...
       Centrumindex 0:
               36 - 15.992481203007529 = 20.00751879699247
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 400.6855814347896
       Euclidische afstand: 20.017132198064477
        _____
       Centrumindex 1:
               36 - 54.156682027649765 = -18.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 330.0813353437107
       Euclidische afstand: 18.168140668315807
       Centrumindex 2:
               36 - 31.63235294117647 = 4.367647058823529
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 19.433991733948478
       Euclidische afstand: 4.408400133149041
{0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
______
Afstand van bronindex 391 tot...
       Centrumindex 0:
               21 - 15.992481203007529 = 5.007518796992471
```

1 - 0.3796992481203007 = 0.6203007518796992

```
Totale euclidische som: 25.46001752501545
       Euclidische afstand: 5.0457920612145175
       Centrumindex 1:
              21 - 54.156682027649765 = -33.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1099.7817961732037
       Euclidische afstand: 33.162958193942885
  -----
       Centrumindex 2:
              21 - 31.63235294117647 = -10.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 113.4045799692426
       Euclidische afstand: 10.649158650768737
  -----
{0: 5.0457920612145175, 1: 33.162958193942885, 2: 10.649158650768737}
_____
Afstand van bronindex 392 tot...
      Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 144.32467917915065
       Euclidische afstand: 12.013520682096097
 ._____
       Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 684.2979252054618
       Euclidische afstand: 26.1590887686376
 ._____
       Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 13.355560361399464
       Euclidische afstand: 3.6545260104970474
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
Afstand van bronindex 393 tot...
       Centrumindex 0:
              23 - 15.992481203007529 = 7.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 49.49009271298533
       Euclidische afstand: 7.034919524272138
```

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Centrumindex 1:

```
23 - 54.156682027649765 = -31.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 971.1550680626045
      Euclidische afstand: 31.16336098790701
          ._____
      Centrumindex 2:
              23 - 31.63235294117647 = -8.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 74.87516820453672
      Euclidische afstand: 8.653043869329261
  _____
{0: 7.034919524272138, 1: 31.16336098790701, 2: 8.653043869329261}
______
Afstand van bronindex 394 tot...
      Centrumindex 0:
              24 - 15.992481203007529 = 8.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 64.50513030697027
      Euclidische afstand: 8.031508594714337
          ._____
      Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 909.841704007305
      Euclidische afstand: 30.163582413355762
      Centrumindex 2:
              24 - 31.63235294117647 = -7.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 58.61046232218378
      Euclidische afstand: 7.655747012681635
{0: 8.031508594714337, 1: 30.163582413355762, 2: 7.655747012681635}
  _____
Afstand van bronindex 395 tot...
      Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 36.234453615240994
      Euclidische afstand: 6.0195060939616125
       _____
      Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1034.178109537259
```

Euclidische afstand: 32.15863973393867

```
Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 92.94379565551712
       Euclidische afstand: 9.640736261070371
{0: 6.0195060939616125, 1: 32.15863973393867, 2: 9.640736261070371}
Afstand van bronindex 396 tot...
       Centrumindex 0:
              31 - 15.992481203007529 = 15.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 225.36979196110548
       Euclidische afstand: 15.012321338191022
       Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 536.3578330395632
       Euclidische afstand: 23.159400532819564
 _____
       Centrumindex 2:
              31 - 31.63235294117647 = -0.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 0.5614427143406386
       Euclidische afstand: 0.7492948113664198
{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}
_____
Afstand van bronindex 397 tot...
       Centrumindex 0:
              46 - 15.992481203007529 = 30.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 900.5953558708795
       Euclidische afstand: 30.009920957424722
       Centrumindex 1:
              46 - 54.156682027649765 = -8.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 66.65737221007022
       Euclidische afstand: 8.16439662253557
 ._____
       Centrumindex 2:
              46 - 31.63235294117647 = 14.367647058823529
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 206.5908544790465
      Euclidische afstand: 14.373268747193398
{0: 30.009920957424722, 1: 8.16439662253557, 2: 14.373268747193398}
_____
Afstand van bronindex 398 tot...
      Centrumindex 0:
              23 - 15.992481203007529 = 7.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 49.24949120922594
      Euclidische afstand: 7.017798173873764
 _____
      Centrumindex 1:
              23 - 54.156682027649765 = -31.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 970.8647454819594
      Euclidische afstand: 31.158702564162702
      Centrumindex 2:
              23 - 31.63235294117647 = -8.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 74.67908977316418
      Euclidische afstand: 8.641706415585071
   _____
{0: 7.017798173873764, 1: 31.158702564162702, 2: 8.641706415585071}
_____
Afstand van bronindex 399 tot...
      Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 144.56528068291004
      Euclidische afstand: 12.023530292011163
      Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 684.5882477861069
      Euclidische afstand: 26.164637352466915
      Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 13.551638792772014
      Euclidische afstand: 3.6812550567397544
  ._____
```

{0: 12.023530292011163, 1: 26.164637352466915, 2: 3.6812550567397544}

```
_____
Afstand van bronindex 400 tot...
      Centrumindex 0:
              39 - 15.992481203007529 = 23.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 529.7306942167444
      Euclidische afstand: 23.01587917540289
   _____
      Centrumindex 1:
              39 - 54.156682027649765 = -15.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 230.1412431778121
      Euclidische afstand: 15.170406823081974
       _____
      Centrumindex 2:
              39 - 31.63235294117647 = 7.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 54.63987408688965
      Euclidische afstand: 7.391878928045943
{0: 23.01587917540289, 1: 15.170406823081974, 2: 7.391878928045943}
Afstand van bronindex 401 tot...
       Centrumindex 0:
              26 - 15.992481203007529 = 10.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 100.29460399118075
      Euclidische afstand: 10.014719366571425
       Centrumindex 1:
              26 - 54.156682027649765 = -28.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 792.9246533160608
      Euclidische afstand: 28.15891782927854
      Centrumindex 2:
              26 - 31.63235294117647 = -5.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 31.88497212610535
      Euclidische afstand: 5.646677972587542
 _____
{0: 10.014719366571425, 1: 28.15891782927854, 2: 5.646677972587542}
_____
Afstand van bronindex 402 tot...
```

Centrumindex 0:

```
21 - 15.992481203007529 = 5.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 25.21941602125605
       Euclidische afstand: 5.021893668852025
          -----
       Centrumindex 1:
              21 - 54.156682027649765 = -33.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1099.4914735925583
       Euclidische afstand: 33.15858069327694
          _____
       Centrumindex 2:
              21 - 31.63235294117647 = -10.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 113.20850153787006
       Euclidische afstand: 10.639948380413792
   _____
{0: 5.021893668852025, 1: 33.15858069327694, 2: 10.639948380413792}
Afstand van bronindex 403 tot...
       Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 144.32467917915065
       Euclidische afstand: 12.013520682096097
 _____
       Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 684.2979252054618
       Euclidische afstand: 26.1590887686376
       Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 13.355560361399464
       Euclidische afstand: 3.6545260104970474
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
_____
Afstand van bronindex 404 tot...
       Centrumindex 0:
              20 - 15.992481203007529 = 4.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 16.204378427271106
```

Euclidische afstand: 4.025466237253904

```
Centrumindex 1:
              20 - 54.156682027649765 = -34.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1166.804837647858
       Euclidische afstand: 34.158525109375816
       Centrumindex 2:
              20 - 31.63235294117647 = -11.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 135.473207420223
       Euclidische afstand: 11.639295830084524
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
  -----
Afstand van bronindex 405 tot...
       Centrumindex 0:
              34 - 15.992481203007529 = 18.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 324.41490474306033
       Euclidische afstand: 18.011521444427185
 ______
       Centrumindex 1:
              34 - 54.156682027649765 = -20.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 406.4177408736646
       Euclidische afstand: 20.159805080249775
        ______
       Centrumindex 2:
              34 - 31.63235294117647 = 2.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 5.767325067281813
       Euclidische afstand: 2.401525570815729
{0: 18.011521444427185, 1: 20.159805080249775, 2: 2.401525570815729}
_____
Afstand van bronindex 406 tot...
       Centrumindex 0:
              51 - 15.992481203007529 = 35.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1225.6705438408044
       Euclidische afstand: 35.009577887212586
 ._____
       Centrumindex 1:
              51 - 54.156682027649765 = -3.156682027649765
```

0 - 0.3548387096774193 = -0.3548387096774193

```
Totale euclidische som: 10.090551933572568
      Euclidische afstand: 3.1765629119494183
      Centrumindex 2:
              51 - 31.63235294117647 = 19.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 375.26732506728183
      Euclidische afstand: 19.371817804926874
     ._____
{0: 35.009577887212586, 1: 3.1765629119494183, 2: 19.371817804926874}
_____
Afstand van bronindex 407 tot...
      Centrumindex 0:
              3 - 15.992481203007529 = -12.992481203007529
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 169.18934083328648
      Euclidische afstand: 13.007280301173127
      Centrumindex 1:
              3 - 54.156682027649765 = -51.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 2617.4223491685952
      Euclidische afstand: 51.16075008410838
 ._____
      Centrumindex 2:
              3 - 31.63235294117647 = -28.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 820.1692858515955
       Euclidische afstand: 28.638597833196993
   _____
{0: 13.007280301173127, 1: 51.16075008410838, 2: 28.638597833196993}
_____
Afstand van bronindex 408 tot...
      Centrumindex 0:
              21 - 15.992481203007529 = 5.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 25.21941602125605
      Euclidische afstand: 5.021893668852025
      Centrumindex 1:
              21 - 54.156682027649765 = -33.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1099.4914735925583
      Euclidische afstand: 33.15858069327694
```

Centrumindex 2:

```
21 - 31.63235294117647 = -10.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 113.20850153787006
      Euclidische afstand: 10.639948380413792
  _____
{0: 5.021893668852025, 1: 33.15858069327694, 2: 10.639948380413792}
  -----
Afstand van bronindex 409 tot...
      Centrumindex 0:
             54 - 15.992481203007529 = 38.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1444.715656622759
      Euclidische afstand: 38.009415368073725
       -----
      Centrumindex 1:
             54 - 54.156682027649765 = -0.15668202764976513
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 0.15045976767397765
      Euclidische afstand: 0.38789143800034775
          ._____
      Centrumindex 2:
             54 - 31.63235294117647 = 22.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 500.473207420223
      Euclidische afstand: 22.371258512212115
 _____
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
_____
Afstand van bronindex 410 tot...
      Centrumindex 0:
             54 - 15.992481203007529 = 38.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1444.715656622759
      Euclidische afstand: 38.009415368073725
      Centrumindex 1:
             54 - 54.156682027649765 = -0.15668202764976513
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 0.15045976767397765
      Euclidische afstand: 0.38789143800034775
       .____
      Centrumindex 2:
             54 - 31.63235294117647 = 22.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 500.473207420223
```

Euclidische afstand: 22.371258512212115

```
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
_____
Afstand van bronindex 411 tot...
      Centrumindex 0:
             54 - 15.992481203007529 = 38.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1444.715656622759
      Euclidische afstand: 38.009415368073725
          -----
      Centrumindex 1:
             54 - 54.156682027649765 = -0.15668202764976513
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 0.15045976767397765
      Euclidische afstand: 0.38789143800034775
 ______
      Centrumindex 2:
             54 - 31.63235294117647 = 22.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 500.473207420223
      Euclidische afstand: 22.371258512212115
  _____
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
Afstand van bronindex 412 tot...
      Centrumindex 0:
             33 - 15.992481203007529 = 17.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 289.6404686528347
      Euclidische afstand: 17.018826888268027
      Centrumindex 1:
             33 - 54.156682027649765 = -21.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 448.0214275096093
      Euclidische afstand: 21.166516659800433
      Centrumindex 2:
             33 - 31.63235294117647 = 1.367647058823529
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 2.228109381007304
      Euclidische afstand: 1.492685292018148
    _____
{0: 17.018826888268027, 1: 21.166516659800433, 2: 1.492685292018148}
```

```
Afstand van bronindex 413 tot...
       Centrumindex 0:
               54 - 15.992481203007529 = 38.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1444.715656622759
       Euclidische afstand: 38.009415368073725
       Centrumindex 1:
               54 - 54.156682027649765 = -0.15668202764976513
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 0.15045976767397765
       Euclidische afstand: 0.38789143800034775
       Centrumindex 2:
               54 - 31.63235294117647 = 22.36764705882353
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 500.473207420223
       Euclidische afstand: 22.371258512212115
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
    _____
Afstand van bronindex 414 tot...
       Centrumindex 0:
               44 - 15.992481203007529 = 28.00751879699247
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 784.8058821866691
       Euclidische afstand: 28.014387057129575
        ._____
       Centrumindex 1:
               44 - 54.156682027649765 = -10.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 103.57442290131443
       Euclidische afstand: 10.177152003449415
       Centrumindex 2:
               44 - 31.63235294117647 = 12.367647058823529
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 153.31634467512495
       Euclidische afstand: 12.382097749376918
{0: 28.014387057129575, 1: 10.177152003449415, 2: 12.382097749376918}
______
Afstand van bronindex 415 tot...
       Centrumindex 0:
               54 - 15.992481203007529 = 38.00751879699247
```

0 - 0.3796992481203007 = -0.3796992481203007

```
Totale euclidische som: 1444.715656622759
       Euclidische afstand: 38.009415368073725
       Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 0.15045976767397765
       Euclidische afstand: 0.38789143800034775
   _____
       Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 500.473207420223
       Euclidische afstand: 22.371258512212115
  -----
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
_____
Afstand van bronindex 416 tot...
      Centrumindex 0:
              34 - 15.992481203007529 = 18.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 324.6555062468197
       Euclidische afstand: 18.01819930644624
 ._____
       Centrumindex 1:
              34 - 54.156682027649765 = -20.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 406.70806345430975
       Euclidische afstand: 20.16700432524151
 _____
       Centrumindex 2:
              34 - 31.63235294117647 = 2.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 5.963403498654362
       Euclidische afstand: 2.4420080873441763
{0: 18.01819930644624, 1: 20.16700432524151, 2: 2.4420080873441763}
Afstand van bronindex 417 tot...
       Centrumindex 0:
              18 - 15.992481203007529 = 2.0075187969924713
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 4.414904743060619
       Euclidische afstand: 2.1011674714454864
```

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Centrumindex 1:

```
18 - 54.156682027649765 = -36.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1307.7218883391024
      Euclidische afstand: 36.16243753315175
         -----
      Centrumindex 2:
             18 - 31.63235294117647 = -13.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 186.19869761630144
      Euclidische afstand: 13.645464360596215
  _____
{0: 2.1011674714454864, 1: 36.16243753315175, 2: 13.645464360596215}
______
Afstand van bronindex 418 tot...
      Centrumindex 0:
             30 - 15.992481203007529 = 14.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 196.35475436712053
      Euclidische afstand: 14.012664071015209
      Centrumindex 1:
             30 - 54.156682027649765 = -24.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 583.6711970948627
      Euclidische afstand: 24.159288008856194
 _____
      Centrumindex 2:
             30 - 31.63235294117647 = -1.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 2.8261485966935807
      Euclidische afstand: 1.681115283582176
 _____
{0: 14.012664071015209, 1: 24.159288008856194, 2: 1.681115283582176}
  _____
Afstand van bronindex 419 tot...
      Centrumindex 0:
             10 - 15.992481203007529 = -5.992481203007529
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 36.054002487421684
      Euclidische afstand: 6.004498520894288
       ._____
      Centrumindex 1:
             10 - 54.156682027649765 = -44.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1949.9384782008533
```

Euclidische afstand: 44.15810772894207

```
Centrumindex 2:
              10 - 31.63235294117647 = -21.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 468.12026624375244
       Euclidische afstand: 21.63608712877059
{0: 6.004498520894288, 1: 44.15810772894207, 2: 21.63608712877059}
Afstand van bronindex 420 tot...
       Centrumindex 0:
              54 - 15.992481203007529 = 38.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1444.715656622759
       Euclidische afstand: 38.009415368073725
       Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 0.15045976767397765
       Euclidische afstand: 0.38789143800034775
 _____
       Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 500.473207420223
       Euclidische afstand: 22.371258512212115
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
_____
Afstand van bronindex 421 tot...
       Centrumindex 0:
              21 - 15.992481203007529 = 5.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 25.21941602125605
       Euclidische afstand: 5.021893668852025
       Centrumindex 1:
              21 - 54.156682027649765 = -33.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1099.4914735925583
       Euclidische afstand: 33.15858069327694
 ._____
       Centrumindex 2:
              21 - 31.63235294117647 = -10.632352941176471
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 113.20850153787006
      Euclidische afstand: 10.639948380413792
{0: 5.021893668852025, 1: 33.15858069327694, 2: 10.639948380413792}
_____
Afstand van bronindex 422 tot...
       Centrumindex 0:
              29 - 15.992481203007529 = 13.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 169.3397167731356
      Euclidische afstand: 13.013059470129829
 _____
       Centrumindex 1:
              29 - 54.156682027649765 = -25.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 632.9845611501622
      Euclidische afstand: 25.15918442935228
      Centrumindex 2:
              29 - 31.63235294117647 = -2.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 7.090854479046523
      Euclidische afstand: 2.662865839475681
  -----
{0: 13.013059470129829, 1: 25.15918442935228, 2: 2.662865839475681}
_____
Afstand van bronindex 423 tot...
      Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 144.32467917915065
      Euclidische afstand: 12.013520682096097
      Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 684.2979252054618
      Euclidische afstand: 26.1590887686376
      Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 13.355560361399464
      Euclidische afstand: 3.6545260104970474
  .-----
```

{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}

```
_____
Afstand van bronindex 424 tot...
       Centrumindex 0:
              18 - 15.992481203007529 = 2.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 4.174303239301221
       Euclidische afstand: 2.0431111666527646
   -----
       Centrumindex 1:
              18 - 54.156682027649765 = -36.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1307.431565758457
       Euclidische afstand: 36.15842316471305
       ______
       Centrumindex 2:
              18 - 31.63235294117647 = -13.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 186.00261918492888
       Euclidische afstand: 13.638277720626196
{0: 2.0431111666527646, 1: 36.15842316471305, 2: 13.638277720626196}
Afstand van bronindex 425 tot...
       Centrumindex 0:
              54 - 15.992481203007529 = 38.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1444.715656622759
       Euclidische afstand: 38.009415368073725
       Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 0.15045976767397765
       Euclidische afstand: 0.38789143800034775
       Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 500.473207420223
       Euclidische afstand: 22.371258512212115
 _____
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
_____
Afstand van bronindex 426 tot...
      Centrumindex 0:
```

```
28 - 15.992481203007529 = 12.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 144.56528068291004
       Euclidische afstand: 12.023530292011163
          -----
       Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 684.5882477861069
       Euclidische afstand: 26.164637352466915
       _____
       Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 13.551638792772014
       Euclidische afstand: 3.6812550567397544
   _____
{0: 12.023530292011163, 1: 26.164637352466915, 2: 3.6812550567397544}
2
Afstand van bronindex 427 tot...
       Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 9.429942337045562
       Euclidische afstand: 3.0708211177217017
 _____
       Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1236.4085242838028
       Euclidische afstand: 35.16260121611885
       Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 159.93399173394852
       Euclidische afstand: 12.64650116569593
{0: 3.0708211177217017, 1: 35.16260121611885, 2: 12.64650116569593}
______
Afstand van bronindex 428 tot...
       Centrumindex 0:
              54 - 15.992481203007529 = 38.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1444.715656622759
```

Euclidische afstand: 38.009415368073725

```
Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 0.15045976767397765
       Euclidische afstand: 0.38789143800034775
       Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 500.473207420223
       Euclidische afstand: 22.371258512212115
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
  -----
Afstand van bronindex 429 tot...
       Centrumindex 0:
              32 - 15.992481203007529 = 16.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 256.6254310588498
       Euclidische afstand: 16.01953279777066
 _____
       Centrumindex 1:
              32 - 54.156682027649765 = -22.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 491.3347915649088
       Euclidische afstand: 22.166072984741994
        -----
       Centrumindex 2:
              32 - 31.63235294117647 = 0.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 0.49281526336024584
       Euclidische afstand: 0.7020080222905191
{0: 16.01953279777066, 1: 22.166072984741994, 2: 0.7020080222905191}
_____
Afstand van bronindex 430 tot...
       Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 144.56528068291004
       Euclidische afstand: 12.023530292011163
 _____
       Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
```

```
Totale euclidische som: 684.5882477861069
      Euclidische afstand: 26.164637352466915
      Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 13.551638792772014
      Euclidische afstand: 3.6812550567397544
     -----
{0: 12.023530292011163, 1: 26.164637352466915, 2: 3.6812550567397544}
_____
Afstand van bronindex 431 tot...
      Centrumindex 0:
              54 - 15.992481203007529 = 38.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1444.9562581265186
      Euclidische afstand: 38.0125802613624
      Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 0.44078234831913904
      Euclidische afstand: 0.6639144133991512
 ._____
       Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 500.66928585159553
       Euclidische afstand: 22.3756404567913
   _____
{0: 38.0125802613624, 1: 0.6639144133991512, 2: 22.3756404567913}
_____
Afstand van bronindex 432 tot...
      Centrumindex 0:
              42 - 15.992481203007529 = 26.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 676.7758069986992
      Euclidische afstand: 26.01491508728597
      Centrumindex 1:
              42 - 54.156682027649765 = -12.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 148.2011510119135
      Euclidische afstand: 12.173789509101654
```

Centrumindex 2:

```
42 - 31.63235294117647 = 10.367647058823529
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 107.84575643983082
      Euclidische afstand: 10.38488114712108
 _____
{0: 26.01491508728597, 1: 12.173789509101654, 2: 10.38488114712108}
------
Afstand van bronindex 433 tot...
      Centrumindex 0:
             17 - 15.992481203007529 = 1.0075187969924713
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1.1592656453162782
      Euclidische afstand: 1.0766919918510949
       -----
      Centrumindex 1:
             17 - 54.156682027649765 = -37.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1380.7449298137565
      Euclidische afstand: 37.158376307553546
          ._____
      Centrumindex 2:
             17 - 31.63235294117647 = -14.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 214.26732506728183
      Euclidische afstand: 14.637872969365523
  _____
{0: 1.0766919918510949, 1: 37.158376307553546, 2: 14.637872969365523}
_____
Afstand van bronindex 434 tot...
      Centrumindex 0:
             50 - 15.992481203007529 = 34.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1156.6555062468194
      Euclidische afstand: 34.009638431580235
      Centrumindex 1:
             50 - 54.156682027649765 = -4.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 17.4039159888721
      Euclidische afstand: 4.171800089754074
       -----
      Centrumindex 2:
             50 - 31.63235294117647 = 18.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 337.53203094963476
```

Euclidische afstand: 18.372044822219294

```
{0: 34.009638431580235, 1: 4.171800089754074, 2: 18.372044822219294}
_____
Afstand van bronindex 435 tot...
      Centrumindex 0:
             14 - 15.992481203007529 = -1.9924812030075287
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 4.354754367120849
      Euclidische afstand: 2.0868048224788174
          -----
      Centrumindex 1:
             14 - 54.156682027649765 = -40.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1612.9753445603005
      Euclidische afstand: 40.16186430633295
  _____
      Centrumindex 2:
             14 - 31.63235294117647 = -17.63235294117647
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 311.2575211457132
      Euclidische afstand: 17.64249191995601
   _____
{0: 2.0868048224788174, 1: 40.16186430633295, 2: 17.64249191995601}
_____
Afstand van bronindex 436 tot...
      Centrumindex 0:
             21 - 15.992481203007529 = 5.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 25.21941602125605
      Euclidische afstand: 5.021893668852025
      Centrumindex 1:
             21 - 54.156682027649765 = -33.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1099.4914735925583
      Euclidische afstand: 33.15858069327694
      Centrumindex 2:
             21 - 31.63235294117647 = -10.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 113.20850153787006
      Euclidische afstand: 10.639948380413792
    _____
{0: 5.021893668852025, 1: 33.15858069327694, 2: 10.639948380413792}
```

```
Afstand van bronindex 437 tot...
       Centrumindex 0:
               24 - 15.992481203007529 = 8.007518796992471
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 64.50513030697027
       Euclidische afstand: 8.031508594714337
       Centrumindex 1:
               24 - 54.156682027649765 = -30.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 909.841704007305
       Euclidische afstand: 30.163582413355762
       Centrumindex 2:
               24 - 31.63235294117647 = -7.632352941176471
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 58.61046232218378
       Euclidische afstand: 7.655747012681635
{0: 8.031508594714337, 1: 30.163582413355762, 2: 7.655747012681635}
    _____
Afstand van bronindex 438 tot...
       Centrumindex 0:
               64 - 15.992481203007529 = 48.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 2304.8660325626083
       Euclidische afstand: 48.00902032496194
        ._____
       Centrumindex 1:
               64 - 54.156682027649765 = 9.843317972350235
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 97.01681921467868
       Euclidische afstand: 9.849711631041727
       Centrumindex 2:
               64 - 31.63235294117647 = 32.36764705882353
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 1047.8261485966937
       Euclidische afstand: 32.37014285721788
{0: 48.00902032496194, 1: 9.849711631041727, 2: 32.37014285721788}
______
Afstand van bronindex 439 tot...
       Centrumindex 0:
               31 - 15.992481203007529 = 15.007518796992471
```

0 - 0.3796992481203007 = -0.3796992481203007

```
Totale euclidische som: 225.36979196110548
      Euclidische afstand: 15.012321338191022
      Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 536.3578330395632
      Euclidische afstand: 23.159400532819564
  -----
      Centrumindex 2:
              31 - 31.63235294117647 = -0.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 0.5614427143406386
      Euclidische afstand: 0.7492948113664198
  _____
{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}
_____
Afstand van bronindex 440 tot...
      Centrumindex 0:
             45 - 15.992481203007529 = 29.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 841.8209197806541
      Euclidische afstand: 29.0141503370451
 ._____
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 84.2610588460149
      Euclidische afstand: 9.179382269304122
 ._____
       Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 179.05163879277202
      Euclidische afstand: 13.381017853391125
{0: 29.0141503370451, 1: 9.179382269304122, 2: 13.381017853391125}
Afstand van bronindex 441 tot...
      Centrumindex 0:
              20 - 15.992481203007529 = 4.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 16.204378427271106
      Euclidische afstand: 4.025466237253904
```

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Centrumindex 1:

```
20 - 54.156682027649765 = -34.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1166.804837647858
      Euclidische afstand: 34.158525109375816
         -----
      Centrumindex 2:
             20 - 31.63235294117647 = -11.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 135.473207420223
      Euclidische afstand: 11.639295830084524
  _____
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
______
Afstand van bronindex 442 tot...
      Centrumindex 0:
             25 - 15.992481203007529 = 9.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 81.27956639719581
      Euclidische afstand: 9.01551808811872
         ._____
      Centrumindex 1:
             25 - 54.156682027649765 = -29.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 850.2380173713603
      Euclidische afstand: 29.158841152750917
_____
      Centrumindex 2:
             25 - 31.63235294117647 = -6.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 44.14967800845829
      Euclidische afstand: 6.644522406347825
 _____
{0: 9.01551808811872, 1: 29.158841152750917, 2: 6.644522406347825}
  _____
Afstand van bronindex 443 tot...
      Centrumindex 0:
             28 - 15.992481203007529 = 12.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 144.56528068291004
      Euclidische afstand: 12.023530292011163
       _____
      Centrumindex 1:
             28 - 54.156682027649765 = -26.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 684.5882477861069
```

Euclidische afstand: 26.164637352466915

```
Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 13.551638792772014
       Euclidische afstand: 3.6812550567397544
{0: 12.023530292011163, 1: 26.164637352466915, 2: 3.6812550567397544}
Afstand van bronindex 444 tot...
       Centrumindex 0:
              54 - 15.992481203007529 = 38.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1444.9562581265186
       Euclidische afstand: 38.0125802613624
       Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 0.44078234831913904
       Euclidische afstand: 0.6639144133991512
 _____
       Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 500.66928585159553
       Euclidische afstand: 22.3756404567913
{0: 38.0125802613624, 1: 0.6639144133991512, 2: 22.3756404567913}
_____
Afstand van bronindex 445 tot...
       Centrumindex 0:
              4 - 15.992481203007529 = -11.992481203007529
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 144.20437842727142
       Euclidische afstand: 12.008512748349457
       Centrumindex 1:
              4 - 54.156682027649765 = -50.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 2516.1089851132956
       Euclidische afstand: 50.160831184434095
 ______
       Centrumindex 2:
              4 - 31.63235294117647 = -27.63235294117647
```

1 - 0.4019607843137254 = 0.5980392156862746

```
Totale euclidische som: 763.9045799692426
      Euclidische afstand: 27.63882378049476
{0: 12.008512748349457, 1: 50.160831184434095, 2: 27.63882378049476}
_____
Afstand van bronindex 446 tot...
      Centrumindex 0:
              13 - 15.992481203007529 = -2.9924812030075287
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 9.339716773135907
      Euclidische afstand: 3.0560950203054724
 _____
      Centrumindex 1:
              13 - 54.156682027649765 = -41.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1694.2887086156
      Euclidische afstand: 41.161738406141204
      Centrumindex 2:
              13 - 31.63235294117647 = -18.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 347.52222702806614
      Euclidische afstand: 18.64194804810018
   _____
{0: 3.0560950203054724, 1: 41.161738406141204, 2: 18.64194804810018}
_____
Afstand van bronindex 447 tot...
      Centrumindex 0:
              34 - 15.992481203007529 = 18.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 324.6555062468197
      Euclidische afstand: 18.01819930644624
      Centrumindex 1:
              34 - 54.156682027649765 = -20.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 406.70806345430975
      Euclidische afstand: 20.16700432524151
      Centrumindex 2:
              34 - 31.63235294117647 = 2.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 5.963403498654362
      Euclidische afstand: 2.4420080873441763
  .-----
```

{0: 18.01819930644624, 1: 20.16700432524151, 2: 2.4420080873441763}

```
_____
Afstand van bronindex 448 tot...
       Centrumindex 0:
              5 - 15.992481203007529 = -10.992481203007529
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 121.21941602125636
       Euclidische afstand: 11.009968938251205
       Centrumindex 1:
              5 - 54.156682027649765 = -49.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 2416.795621057996
       Euclidische afstand: 49.16091558400836
  ______
       Centrumindex 2:
              5 - 31.63235294117647 = -26.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 709.6398740868897
       Euclidische afstand: 26.639066689486132
{0: 11.009968938251205, 1: 49.16091558400836, 2: 26.639066689486132}
Afstand van bronindex 449 tot...
       Centrumindex 0:
              52 - 15.992481203007529 = 36.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1296.9261829385487
       Euclidische afstand: 36.01286135450152
       Centrumindex 1:
              52 - 54.156682027649765 = -2.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 5.0675104589182
       Euclidische afstand: 2.2511131599540257
       Centrumindex 2:
              52 - 31.63235294117647 = 20.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 415.19869761630144
       Euclidische afstand: 20.376425045044126
 _____
{0: 36.01286135450152, 1: 2.2511131599540257, 2: 20.376425045044126}
_____
Afstand van bronindex 450 tot...
      Centrumindex 0:
```

```
36 - 15.992481203007529 = 20.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 400.4449799310302
       Euclidische afstand: 20.011121406133896
          -----
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 329.79101276306557
       Euclidische afstand: 18.160149029208586
          _____
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 19.23791330257593
       Euclidische afstand: 4.386104570410506
    -----
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
2
Afstand van bronindex 451 tot...
       Centrumindex 0:
              54 - 15.992481203007529 = 38.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1444.715656622759
       Euclidische afstand: 38.009415368073725
       Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 0.15045976767397765
       Euclidische afstand: 0.38789143800034775
       Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 500.473207420223
       Euclidische afstand: 22.371258512212115
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
_____
Afstand van bronindex 452 tot...
       Centrumindex 0:
              30 - 15.992481203007529 = 14.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 196.35475436712053
       Euclidische afstand: 14.012664071015209
```

```
Centrumindex 1:
              30 - 54.156682027649765 = -24.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 583.6711970948627
       Euclidische afstand: 24.159288008856194
       Centrumindex 2:
              30 - 31.63235294117647 = -1.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.8261485966935807
       Euclidische afstand: 1.681115283582176
{0: 14.012664071015209, 1: 24.159288008856194, 2: 1.681115283582176}
  -----
Afstand van bronindex 453 tot...
       Centrumindex 0:
              49 - 15.992481203007529 = 33.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1089.881070156594
       Euclidische afstand: 33.01334684876094
 _____
       Centrumindex 1:
              49 - 54.156682027649765 = -5.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 27.00760262481679
       Euclidische afstand: 5.1968839341298345
        ______
       Centrumindex 2:
              49 - 31.63235294117647 = 17.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 301.9928152633602
       Euclidische afstand: 17.37794047818556
{0: 33.01334684876094, 1: 5.1968839341298345, 2: 17.37794047818556}
______
Afstand van bronindex 454 tot...
       Centrumindex 0:
              54 - 15.992481203007529 = 38.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1444.715656622759
       Euclidische afstand: 38.009415368073725
 _____
       Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
```

0 - 0.3548387096774193 = -0.3548387096774193

```
Totale euclidische som: 0.15045976767397765
       Euclidische afstand: 0.38789143800034775
      Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 500.473207420223
      Euclidische afstand: 22.371258512212115
     _____
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
_____
Afstand van bronindex 455 tot...
      Centrumindex 0:
              29 - 15.992481203007529 = 13.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 169.58031827689499
      Euclidische afstand: 13.022300805805976
      Centrumindex 1:
              29 - 54.156682027649765 = -25.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 633.2748837308073
      Euclidische afstand: 25.164953481594345
 ._____
       Centrumindex 2:
              29 - 31.63235294117647 = -2.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 7.286932910419072
       Euclidische afstand: 2.6994319606945223
   _____
{0: 13.022300805805976, 1: 25.164953481594345, 2: 2.6994319606945223}
_____
Afstand van bronindex 456 tot...
      Centrumindex 0:
              65 - 15.992481203007529 = 49.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 2401.8810701565935
      Euclidische afstand: 49.00898968716447
      Centrumindex 1:
              65 - 54.156682027649765 = 10.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 117.70345515937915
      Euclidische afstand: 10.849122322076525
```

Centrumindex 2:

```
65 - 31.63235294117647 = 33.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 1113.5614427143407
      Euclidische afstand: 33.37006806577327
  _____
{0: 49.00898968716447, 1: 10.849122322076525, 2: 33.37006806577327}
._____
Afstand van bronindex 457 tot...
      Centrumindex 0:
             54 - 15.992481203007529 = 38.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1444.9562581265186
      Euclidische afstand: 38.0125802613624
       -----
      Centrumindex 1:
             54 - 54.156682027649765 = -0.15668202764976513
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 0.44078234831913904
      Euclidische afstand: 0.6639144133991512
          ._____
      Centrumindex 2:
             54 - 31.63235294117647 = 22.36764705882353
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 500.66928585159553
      Euclidische afstand: 22.3756404567913
 _____
{0: 38.0125802613624, 1: 0.6639144133991512, 2: 22.3756404567913}
_____
Afstand van bronindex 458 tot...
      Centrumindex 0:
             50 - 15.992481203007529 = 34.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1156.896107750579
      Euclidische afstand: 34.01317550230468
      Centrumindex 1:
             50 - 54.156682027649765 = -4.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 17.69423856951726
      Euclidische afstand: 4.206452016785317
       ._____
      Centrumindex 2:
             50 - 31.63235294117647 = 18.36764705882353
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 337.7281093810073
```

Euclidische afstand: 18.377380373192675

```
{0: 34.01317550230468, 1: 4.206452016785317, 2: 18.377380373192675}
_____
Afstand van bronindex 459 tot...
      Centrumindex 0:
             54 - 15.992481203007529 = 38.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1444.715656622759
      Euclidische afstand: 38.009415368073725
          _____
      Centrumindex 1:
             54 - 54.156682027649765 = -0.15668202764976513
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 0.15045976767397765
      Euclidische afstand: 0.38789143800034775
 ______
      Centrumindex 2:
             54 - 31.63235294117647 = 22.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 500.473207420223
      Euclidische afstand: 22.371258512212115
   _____
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
_____
Afstand van bronindex 460 tot...
      Centrumindex 0:
             48 - 15.992481203007529 = 32.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1024.866032562609
      Euclidische afstand: 32.01352889892973
      Centrumindex 1:
             48 - 54.156682027649765 = -6.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 38.32096668011632
      Euclidische afstand: 6.190393095766724
      Centrumindex 2:
             48 - 31.63235294117647 = 16.36764705882353
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 268.2575211457132
      Euclidische afstand: 16.37856895903037
    _____
{0: 32.01352889892973, 1: 6.190393095766724, 2: 16.37856895903037}
```

```
Afstand van bronindex 461 tot...
       Centrumindex 0:
               34 - 15.992481203007529 = 18.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 324.41490474306033
       Euclidische afstand: 18.011521444427185
       Centrumindex 1:
               34 - 54.156682027649765 = -20.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 406.4177408736646
       Euclidische afstand: 20.159805080249775
       Centrumindex 2:
               34 - 31.63235294117647 = 2.367647058823529
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 5.767325067281813
       Euclidische afstand: 2.401525570815729
{0: 18.011521444427185, 1: 20.159805080249775, 2: 2.401525570815729}
    _____
Afstand van bronindex 462 tot...
       Centrumindex 0:
               47 - 15.992481203007529 = 31.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 961.6103934648645
       Euclidische afstand: 31.00984349307272
        ._____
       Centrumindex 1:
               47 - 54.156682027649765 = -7.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 51.34400815477069
       Euclidische afstand: 7.165473337803351
       Centrumindex 2:
               47 - 31.63235294117647 = 15.367647058823529
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 236.32614859669357
       Euclidische afstand: 15.372903063400015
{0: 31.00984349307272, 1: 7.165473337803351, 2: 15.372903063400015}
______
Afstand van bronindex 463 tot...
       Centrumindex 0:
               48 - 15.992481203007529 = 32.00751879699247
```

0 - 0.3796992481203007 = -0.3796992481203007

```
Totale euclidische som: 1024.6254310588495
      Euclidische afstand: 32.00977086857776
      Centrumindex 1:
              48 - 54.156682027649765 = -6.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 38.03064409947116
      Euclidische afstand: 6.16689906674912
  -----
      Centrumindex 2:
              48 - 31.63235294117647 = 16.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 268.06144271434067
      Euclidische afstand: 16.372582041765455
  _____
{0: 32.00977086857776, 1: 6.16689906674912, 2: 16.372582041765455}
_____
Afstand van bronindex 464 tot...
      Centrumindex 0:
              54 - 15.992481203007529 = 38.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1444.715656622759
      Euclidische afstand: 38.009415368073725
 ._____
       Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 0.15045976767397765
      Euclidische afstand: 0.38789143800034775
 _____
       Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 500.473207420223
      Euclidische afstand: 22.371258512212115
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
Afstand van bronindex 465 tot...
      Centrumindex 0:
              38 - 15.992481203007529 = 22.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 484.4750551190001
      Euclidische afstand: 22.010794059256476
```

Centrumindex 1:

```
38 - 54.156682027649765 = -16.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 261.1642846524665
      Euclidische afstand: 16.160578103906634
         -----
      Centrumindex 2:
             38 - 31.63235294117647 = 6.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 40.70850153787004
      Euclidische afstand: 6.380321429040237
  _____
{0: 22.010794059256476, 1: 16.160578103906634, 2: 6.380321429040237}
______
Afstand van bronindex 466 tot...
      Centrumindex 0:
             54 - 15.992481203007529 = 38.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1444.715656622759
      Euclidische afstand: 38.009415368073725
          ._____
      Centrumindex 1:
             54 - 54.156682027649765 = -0.15668202764976513
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 0.15045976767397765
      Euclidische afstand: 0.38789143800034775
      Centrumindex 2:
             54 - 31.63235294117647 = 22.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 500.473207420223
      Euclidische afstand: 22.371258512212115
  _____
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
  -----
Afstand van bronindex 467 tot...
      Centrumindex 0:
             56 - 15.992481203007529 = 40.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1600.745731810729
      Euclidische afstand: 40.00932056172323
       ._____
      Centrumindex 1:
             56 - 54.156682027649765 = 1.8433179723502349
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 3.523731657074917
```

Euclidische afstand: 1.8771605304488257

```
Centrumindex 2:
              56 - 31.63235294117647 = 24.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 593.9437956555171
       Euclidische afstand: 24.3709621405376
{0: 40.00932056172323, 1: 1.8771605304488257, 2: 24.3709621405376}
Afstand van bronindex 468 tot...
       Centrumindex 0:
              54 - 15.992481203007529 = 38.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1444.715656622759
       Euclidische afstand: 38.009415368073725
       Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 0.15045976767397765
       Euclidische afstand: 0.38789143800034775
 _____
       Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 500.473207420223
       Euclidische afstand: 22.371258512212115
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
Afstand van bronindex 469 tot...
       Centrumindex 0:
              75 - 15.992481203007529 = 59.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 3482.2720476002023
       Euclidische afstand: 59.01077907975968
       Centrumindex 1:
              75 - 54.156682027649765 = 20.843317972350235
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 434.860137187029
       Euclidische afstand: 20.853300390754193
 _____
       Centrumindex 2:
              75 - 31.63235294117647 = 43.36764705882353
```

1 - 0.4019607843137254 = 0.5980392156862746

```
Totale euclidische som: 1881.1104623221836
       Euclidische afstand: 43.3717703388066
{0: 59.01077907975968, 1: 20.853300390754193, 2: 43.3717703388066}
-----
Afstand van bronindex 470 tot...
       Centrumindex 0:
              31 - 15.992481203007529 = 15.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 225.36979196110548
       Euclidische afstand: 15.012321338191022
 _____
       Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 536.3578330395632
       Euclidische afstand: 23.159400532819564
       Centrumindex 2:
              31 - 31.63235294117647 = -0.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 0.5614427143406386
       Euclidische afstand: 0.7492948113664198
  .....
{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}
_____
Afstand van bronindex 471 tot...
       Centrumindex 0:
              38 - 15.992481203007529 = 22.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 484.4750551190001
      Euclidische afstand: 22.010794059256476
       Centrumindex 1:
              38 - 54.156682027649765 = -16.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 261.1642846524665
       Euclidische afstand: 16.160578103906634
       Centrumindex 2:
              38 - 31.63235294117647 = 6.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 40.70850153787004
       Euclidische afstand: 6.380321429040237
  .....
{0: 22.010794059256476, 1: 16.160578103906634, 2: 6.380321429040237}
```

```
_____
Afstand van bronindex 472 tot...
      Centrumindex 0:
             33 - 15.992481203007529 = 17.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 289.6404686528347
      Euclidische afstand: 17.018826888268027
  _____
      Centrumindex 1:
             33 - 54.156682027649765 = -21.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 448.0214275096093
      Euclidische afstand: 21.166516659800433
       ______
      Centrumindex 2:
             33 - 31.63235294117647 = 1.367647058823529
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 2.228109381007304
      Euclidische afstand: 1.492685292018148
{0: 17.018826888268027, 1: 21.166516659800433, 2: 1.492685292018148}
Afstand van bronindex 473 tot...
      Centrumindex 0:
             23 - 15.992481203007529 = 7.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 49.49009271298533
      Euclidische afstand: 7.034919524272138
 _____
      Centrumindex 1:
             23 - 54.156682027649765 = -31.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 971.1550680626045
      Euclidische afstand: 31.16336098790701
      Centrumindex 2:
             23 - 31.63235294117647 = -8.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 74.87516820453672
      Euclidische afstand: 8.653043869329261
 ______
{0: 7.034919524272138, 1: 31.16336098790701, 2: 8.653043869329261}
_____
Afstand van bronindex 474 tot...
```

Centrumindex 0:

```
22 - 15.992481203007529 = 6.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 36.234453615240994
       Euclidische afstand: 6.0195060939616125
          -----
       Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1034.178109537259
       Euclidische afstand: 32.15863973393867
          _____
       Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 92.94379565551712
       Euclidische afstand: 9.640736261070371
   _____
{0: 6.0195060939616125, 1: 32.15863973393867, 2: 9.640736261070371}
Afstand van bronindex 475 tot...
       Centrumindex 0:
              31 - 15.992481203007529 = 15.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 225.36979196110548
       Euclidische afstand: 15.012321338191022
 _____
       Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 536.3578330395632
       Euclidische afstand: 23.159400532819564
       Centrumindex 2:
              31 - 31.63235294117647 = -0.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 0.5614427143406386
       Euclidische afstand: 0.7492948113664198
{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}
_____
Afstand van bronindex 476 tot...
       Centrumindex 0:
              34 - 15.992481203007529 = 18.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 324.41490474306033
```

Euclidische afstand: 18.011521444427185

```
Centrumindex 1:
              34 - 54.156682027649765 = -20.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 406.4177408736646
       Euclidische afstand: 20.159805080249775
       Centrumindex 2:
              34 - 31.63235294117647 = 2.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 5.767325067281813
       Euclidische afstand: 2.401525570815729
{0: 18.011521444427185, 1: 20.159805080249775, 2: 2.401525570815729}
  _____
Afstand van bronindex 477 tot...
       Centrumindex 0:
              29 - 15.992481203007529 = 13.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 169.3397167731356
       Euclidische afstand: 13.013059470129829
 _____
       Centrumindex 1:
              29 - 54.156682027649765 = -25.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 632.9845611501622
       Euclidische afstand: 25.15918442935228
         ._____
       Centrumindex 2:
              29 - 31.63235294117647 = -2.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 7.090854479046523
       Euclidische afstand: 2.662865839475681
{0: 13.013059470129829, 1: 25.15918442935228, 2: 2.662865839475681}
______
Afstand van bronindex 478 tot...
       Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 36.234453615240994
       Euclidische afstand: 6.0195060939616125
 _____
       Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
```

0 - 0.3548387096774193 = -0.3548387096774193

```
Totale euclidische som: 1034.178109537259
      Euclidische afstand: 32.15863973393867
      Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 92.94379565551712
      Euclidische afstand: 9.640736261070371
     -----
{0: 6.0195060939616125, 1: 32.15863973393867, 2: 9.640736261070371}
_____
Afstand van bronindex 479 tot...
      Centrumindex 0:
              2 - 15.992481203007529 = -13.992481203007529
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 196.17430323930154
      Euclidische afstand: 14.006223732302063
      Centrumindex 1:
              2 - 54.156682027649765 = -52.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 2720.7357132238944
      Euclidische afstand: 52.16067209329165
 ._____
      Centrumindex 2:
              2 - 31.63235294117647 = -29.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 878.4339917339486
       Euclidische afstand: 29.638387131116776
   _____
{0: 14.006223732302063, 1: 52.16067209329165, 2: 29.638387131116776}
_____
Afstand van bronindex 480 tot...
      Centrumindex 0:
              9 - 15.992481203007529 = -6.992481203007529
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 49.03896489343674
      Euclidische afstand: 7.002782653591124
      Centrumindex 1:
              9 - 54.156682027649765 = -45.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 2039.2518422561527
      Euclidische afstand: 45.158076157606104
```

Centrumindex 2:

```
9 - 31.63235294117647 = -22.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 512.3849721261054
       Euclidische afstand: 22.635922162043794
  _____
{0: 7.002782653591124, 1: 45.158076157606104, 2: 22.635922162043794}
  -----
Afstand van bronindex 481 tot...
       Centrumindex 0:
              31 - 15.992481203007529 = 15.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 225.36979196110548
       Euclidische afstand: 15.012321338191022
       -----
       Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 536.3578330395632
      Euclidische afstand: 23.159400532819564
       Centrumindex 2:
              31 - 31.63235294117647 = -0.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 0.5614427143406386
       Euclidische afstand: 0.7492948113664198
{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}
_____
Afstand van bronindex 482 tot...
       Centrumindex 0:
              50 - 15.992481203007529 = 34.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1156.6555062468194
      Euclidische afstand: 34.009638431580235
       Centrumindex 1:
              50 - 54.156682027649765 = -4.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 17.4039159888721
      Euclidische afstand: 4.171800089754074
       .____
       Centrumindex 2:
              50 - 31.63235294117647 = 18.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 337.53203094963476
```

Euclidische afstand: 18.372044822219294

```
{0: 34.009638431580235, 1: 4.171800089754074, 2: 18.372044822219294}
_____
Afstand van bronindex 483 tot...
      Centrumindex 0:
             63 - 15.992481203007529 = 47.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 2210.091596472383
      Euclidische afstand: 47.01161129415139
          _____
      Centrumindex 1:
             63 - 54.156682027649765 = 8.843317972350235
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 78.62050585062336
      Euclidische afstand: 8.866820504026421
 _____
      Centrumindex 2:
             63 - 31.63235294117647 = 31.36764705882353
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 984.2869329104191
      Euclidische afstand: 31.37334749290262
  ______
{0: 47.01161129415139, 1: 8.866820504026421, 2: 31.37334749290262}
Afstand van bronindex 484 tot...
      Centrumindex 0:
             25 - 15.992481203007529 = 9.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 81.52016790095522
      Euclidische afstand: 9.028851970264837
      Centrumindex 1:
             25 - 54.156682027649765 = -29.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 850.5283399520055
      Euclidische afstand: 29.1638190220692
      Centrumindex 2:
             25 - 31.63235294117647 = -6.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 44.345756439830836
      Euclidische afstand: 6.659260952976001
    _____
{0: 9.028851970264837, 1: 29.1638190220692, 2: 6.659260952976001}
```

```
Afstand van bronindex 485 tot...
       Centrumindex 0:
               31 - 15.992481203007529 = 15.007518796992471
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 225.36979196110548
       Euclidische afstand: 15.012321338191022
       Centrumindex 1:
               31 - 54.156682027649765 = -23.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 536.3578330395632
       Euclidische afstand: 23.159400532819564
       Centrumindex 2:
               31 - 31.63235294117647 = -0.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 0.5614427143406386
       Euclidische afstand: 0.7492948113664198
{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}
   _____
Afstand van bronindex 486 tot...
       Centrumindex 0:
               35 - 15.992481203007529 = 19.00751879699247
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 361.6705438408046
       Euclidische afstand: 19.017637704005317
        _____
       Centrumindex 1:
               35 - 54.156682027649765 = -19.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 367.3946993990102
       Euclidische afstand: 19.16754286284526
       Centrumindex 2:
               35 - 31.63235294117647 = 3.367647058823529
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 11.69869761630142
       Euclidische afstand: 3.420335892321311
{0: 19.017637704005317, 1: 19.16754286284526, 2: 3.420335892321311}
______
Afstand van bronindex 487 tot...
       Centrumindex 0:
               58 - 15.992481203007529 = 42.00751879699247
```

0 - 0.3796992481203007 = -0.3796992481203007

```
Totale euclidische som: 1764.775806998699
       Euclidische afstand: 42.009234782351115
       Centrumindex 1:
              58 - 54.156682027649765 = 3.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 14.897003546475856
       Euclidische afstand: 3.8596636571696057
  -----
       Centrumindex 2:
              58 - 31.63235294117647 = 26.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 695.4143838908112
       Euclidische afstand: 26.370710720244368
  _____
{0: 42.009234782351115, 1: 3.8596636571696057, 2: 26.370710720244368}
_____
Afstand van bronindex 488 tot...
      Centrumindex 0:
              30 - 15.992481203007529 = 14.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 196.35475436712053
       Euclidische afstand: 14.012664071015209
 ._____
       Centrumindex 1:
              30 - 54.156682027649765 = -24.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 583.6711970948627
       Euclidische afstand: 24.159288008856194
 ._____
       Centrumindex 2:
              30 - 31.63235294117647 = -1.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.8261485966935807
       Euclidische afstand: 1.681115283582176
{0: 14.012664071015209, 1: 24.159288008856194, 2: 1.681115283582176}
Afstand van bronindex 489 tot...
       Centrumindex 0:
              9 - 15.992481203007529 = -6.992481203007529
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 49.279566397196135
       Euclidische afstand: 7.019940626329836
```

Centrumindex 1:

```
9 - 54.156682027649765 = -45.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 2039.542164836798
      Euclidische afstand: 45.16129055769773
         ._____
      Centrumindex 2:
             9 - 31.63235294117647 = -22.63235294117647
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 512.581050557478
      Euclidische afstand: 22.64025288192422
  _____
{0: 7.019940626329836, 1: 45.16129055769773, 2: 22.64025288192422}
______
Afstand van bronindex 490 tot...
      Centrumindex 0:
             31 - 15.992481203007529 = 15.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 225.36979196110548
      Euclidische afstand: 15.012321338191022
         ._____
      Centrumindex 1:
             31 - 54.156682027649765 = -23.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 536.3578330395632
      Euclidische afstand: 23.159400532819564
 _____
      Centrumindex 2:
             31 - 31.63235294117647 = -0.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 0.5614427143406386
      Euclidische afstand: 0.7492948113664198
 _____
{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}
  -----
Afstand van bronindex 491 tot...
      Centrumindex 0:
             21 - 15.992481203007529 = 5.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 25.21941602125605
      Euclidische afstand: 5.021893668852025
       ._____
      Centrumindex 1:
             21 - 54.156682027649765 = -33.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1099.4914735925583
```

Euclidische afstand: 33.15858069327694

```
Centrumindex 2:
              21 - 31.63235294117647 = -10.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 113.20850153787006
       Euclidische afstand: 10.639948380413792
{0: 5.021893668852025, 1: 33.15858069327694, 2: 10.639948380413792}
Afstand van bronindex 492 tot...
       Centrumindex 0:
              55 - 15.992481203007529 = 39.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1521.730694216744
       Euclidische afstand: 39.00936674975312
       Centrumindex 1:
              55 - 54.156682027649765 = 0.8433179723502349
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 0.8370957123744474
       Euclidische afstand: 0.9149293482966033
 _____
       Centrumindex 2:
              55 - 31.63235294117647 = 23.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 546.20850153787
       Euclidische afstand: 23.37110398628764
{0: 39.00936674975312, 1: 0.9149293482966033, 2: 23.37110398628764}
_____
Afstand van bronindex 493 tot...
       Centrumindex 0:
              71 - 15.992481203007529 = 55.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 3025.9712957205033
       Euclidische afstand: 55.008829252407324
       Centrumindex 1:
              71 - 54.156682027649765 = 16.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 283.823270827582
       Euclidische afstand: 16.84705525685667
 _____
       Centrumindex 2:
              71 - 31.63235294117647 = 39.36764705882353
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 1549.973207420223
      Euclidische afstand: 39.369699102485185
{0: 55.008829252407324, 1: 16.84705525685667, 2: 39.369699102485185}
-----
Afstand van bronindex 494 tot...
      Centrumindex 0:
              21 - 15.992481203007529 = 5.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 25.21941602125605
      Euclidische afstand: 5.021893668852025
 _____
      Centrumindex 1:
              21 - 54.156682027649765 = -33.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1099.4914735925583
      Euclidische afstand: 33.15858069327694
      Centrumindex 2:
              21 - 31.63235294117647 = -10.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 113.20850153787006
      Euclidische afstand: 10.639948380413792
  _____
{0: 5.021893668852025, 1: 33.15858069327694, 2: 10.639948380413792}
_____
Afstand van bronindex 495 tot...
      Centrumindex 0:
              31 - 15.992481203007529 = 15.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 225.36979196110548
      Euclidische afstand: 15.012321338191022
      Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 536.3578330395632
      Euclidische afstand: 23.159400532819564
      Centrumindex 2:
              31 - 31.63235294117647 = -0.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 0.5614427143406386
      Euclidische afstand: 0.7492948113664198
  .-----
```

{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}

```
_____
Afstand van bronindex 496 tot...
      Centrumindex 0:
              54 - 15.992481203007529 = 38.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1444.9562581265186
      Euclidische afstand: 38.0125802613624
   _____
      Centrumindex 1:
              54 - 54.156682027649765 = -0.15668202764976513
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 0.44078234831913904
      Euclidische afstand: 0.6639144133991512
       ______
      Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 500.66928585159553
      Euclidische afstand: 22.3756404567913
{0: 38.0125802613624, 1: 0.6639144133991512, 2: 22.3756404567913}
Afstand van bronindex 497 tot...
       Centrumindex 0:
              31 - 15.992481203007529 = 15.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 225.36979196110548
      Euclidische afstand: 15.012321338191022
       Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 536.3578330395632
      Euclidische afstand: 23.159400532819564
      Centrumindex 2:
              31 - 31.63235294117647 = -0.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 0.5614427143406386
      Euclidische afstand: 0.7492948113664198
 _____
{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}
_____
Afstand van bronindex 498 tot...
      Centrumindex 0:
```

```
25 - 15.992481203007529 = 9.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 81.27956639719581
       Euclidische afstand: 9.01551808811872
          -----
       Centrumindex 1:
              25 - 54.156682027649765 = -29.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 850.2380173713603
       Euclidische afstand: 29.158841152750917
          _____
       Centrumindex 2:
              25 - 31.63235294117647 = -6.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 44.14967800845829
       Euclidische afstand: 6.644522406347825
    _____
{0: 9.01551808811872, 1: 29.158841152750917, 2: 6.644522406347825}
2
Afstand van bronindex 499 tot...
       Centrumindex 0:
              24 - 15.992481203007529 = 8.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 64.26452880321087
       Euclidische afstand: 8.016516001556466
       Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 909.5513814266599
       Euclidische afstand: 30.158769560886597
       Centrumindex 2:
              24 - 31.63235294117647 = -7.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 58.41438389081123
       Euclidische afstand: 7.642930320944397
{0: 8.016516001556466, 1: 30.158769560886597, 2: 7.642930320944397}
_____
Afstand van bronindex 500 tot...
       Centrumindex 0:
              17 - 15.992481203007529 = 1.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1.1592656453162782
```

Euclidische afstand: 1.0766919918510949

```
Centrumindex 1:
              17 - 54.156682027649765 = -37.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1380.7449298137565
       Euclidische afstand: 37.158376307553546
       Centrumindex 2:
              17 - 31.63235294117647 = -14.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 214.26732506728183
       Euclidische afstand: 14.637872969365523
{0: 1.0766919918510949, 1: 37.158376307553546, 2: 14.637872969365523}
  _____
Afstand van bronindex 501 tot...
       Centrumindex 0:
              21 - 15.992481203007529 = 5.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 25.21941602125605
       Euclidische afstand: 5.021893668852025
 ______
       Centrumindex 1:
              21 - 54.156682027649765 = -33.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1099.4914735925583
       Euclidische afstand: 33.15858069327694
        _____
       Centrumindex 2:
              21 - 31.63235294117647 = -10.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 113.20850153787006
       Euclidische afstand: 10.639948380413792
{0: 5.021893668852025, 1: 33.15858069327694, 2: 10.639948380413792}
_____
Afstand van bronindex 502 tot...
       Centrumindex 0:
              31 - 15.992481203007529 = 15.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 225.36979196110548
       Euclidische afstand: 15.012321338191022
 ._____
       Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
```

0 - 0.3548387096774193 = -0.3548387096774193

```
Totale euclidische som: 536.3578330395632
       Euclidische afstand: 23.159400532819564
      Centrumindex 2:
              31 - 31.63235294117647 = -0.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 0.5614427143406386
      Euclidische afstand: 0.7492948113664198
     -----
{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}
_____
Afstand van bronindex 503 tot...
      Centrumindex 0:
              37 - 15.992481203007529 = 21.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 441.46001752501513
      Euclidische afstand: 21.01094994342272
      Centrumindex 1:
              37 - 54.156682027649765 = -17.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 294.47764870776604
      Euclidische afstand: 17.16035106598248
 ._____
       Centrumindex 2:
              37 - 31.63235294117647 = 5.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 28.973207420222987
       Euclidische afstand: 5.382676603718915
   _____
{0: 21.01094994342272, 1: 17.16035106598248, 2: 5.382676603718915}
_____
Afstand van bronindex 504 tot...
      Centrumindex 0:
              16 - 15.992481203007529 = 0.007518796992471266
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 0.3848295550907342
      Euclidische afstand: 0.6203463186726703
      Centrumindex 1:
              16 - 54.156682027649765 = -38.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1456.3486164497015
      Euclidische afstand: 38.162135899995185
```

Centrumindex 2:

```
16 - 31.63235294117647 = -15.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 244.72810938100733
      Euclidische afstand: 15.643788204300368
  _____
{0: 0.6203463186726703, 1: 38.162135899995185, 2: 15.643788204300368}
  -----
Afstand van bronindex 505 tot...
      Centrumindex 0:
             18 - 15.992481203007529 = 2.0075187969924713
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 4.174303239301221
      Euclidische afstand: 2.0431111666527646
       ._____
      Centrumindex 1:
             18 - 54.156682027649765 = -36.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1307.431565758457
      Euclidische afstand: 36.15842316471305
          ._____
      Centrumindex 2:
             18 - 31.63235294117647 = -13.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 186.00261918492888
      Euclidische afstand: 13.638277720626196
 -----
{0: 2.0431111666527646, 1: 36.15842316471305, 2: 13.638277720626196}
_____
Afstand van bronindex 506 tot...
      Centrumindex 0:
             33 - 15.992481203007529 = 17.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 289.6404686528347
      Euclidische afstand: 17.018826888268027
      Centrumindex 1:
             33 - 54.156682027649765 = -21.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 448.0214275096093
      Euclidische afstand: 21.166516659800433
       .____
      Centrumindex 2:
             33 - 31.63235294117647 = 1.367647058823529
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 2.228109381007304
```

Euclidische afstand: 1.492685292018148

```
{0: 17.018826888268027, 1: 21.166516659800433, 2: 1.492685292018148}
_____
Afstand van bronindex 507 tot...
      Centrumindex 0:
             31 - 15.992481203007529 = 15.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 225.61039346486487
      Euclidische afstand: 15.020332668248892
          _____
      Centrumindex 1:
             31 - 54.156682027649765 = -23.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 536.6481556202083
      Euclidische afstand: 23.165667605752446
  _____
      Centrumindex 2:
             31 - 31.63235294117647 = -0.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 0.7575211457131878
      Euclidische afstand: 0.8703569070865055
  ______
{0: 15.020332668248892, 1: 23.165667605752446, 2: 0.8703569070865055}
_____
Afstand van bronindex 508 tot...
      Centrumindex 0:
             28 - 15.992481203007529 = 12.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 144.32467917915065
      Euclidische afstand: 12.013520682096097
      Centrumindex 1:
             28 - 54.156682027649765 = -26.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 684.2979252054618
      Euclidische afstand: 26.1590887686376
      Centrumindex 2:
             28 - 31.63235294117647 = -3.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 13.355560361399464
      Euclidische afstand: 3.6545260104970474
    -----
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
```

```
Afstand van bronindex 509 tot...
       Centrumindex 0:
               26 - 15.992481203007529 = 10.007518796992471
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 100.53520549494016
       Euclidische afstand: 10.026724564629276
       Centrumindex 1:
               26 - 54.156682027649765 = -28.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 793.2149758967059
       Euclidische afstand: 28.164072430966122
       Centrumindex 2:
               26 - 31.63235294117647 = -5.632352941176471
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 32.081050557477894
       Euclidische afstand: 5.66401364382872
{0: 10.026724564629276, 1: 28.164072430966122, 2: 5.66401364382872}
   -----
Afstand van bronindex 510 tot...
       Centrumindex 0:
               29 - 15.992481203007529 = 13.007518796992471
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 169.58031827689499
       Euclidische afstand: 13.022300805805976
        ._____
       Centrumindex 1:
               29 - 54.156682027649765 = -25.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 633.2748837308073
       Euclidische afstand: 25.164953481594345
       Centrumindex 2:
               29 - 31.63235294117647 = -2.632352941176471
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 7.286932910419072
       Euclidische afstand: 2.6994319606945223
{0: 13.022300805805976, 1: 25.164953481594345, 2: 2.6994319606945223}
______
Afstand van bronindex 511 tot...
       Centrumindex 0:
               31 - 15.992481203007529 = 15.007518796992471
```

0 - 0.3796992481203007 = -0.3796992481203007

```
Totale euclidische som: 225.36979196110548
      Euclidische afstand: 15.012321338191022
      Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 536.3578330395632
      Euclidische afstand: 23.159400532819564
  -----
      Centrumindex 2:
              31 - 31.63235294117647 = -0.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 0.5614427143406386
      Euclidische afstand: 0.7492948113664198
  -----
{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}
_____
Afstand van bronindex 512 tot...
      Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 400.6855814347896
      Euclidische afstand: 20.017132198064477
 ._____
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 330.0813353437107
      Euclidische afstand: 18.168140668315807
 _____
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 19.433991733948478
      Euclidische afstand: 4.408400133149041
{0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
Afstand van bronindex 513 tot...
      Centrumindex 0:
              54 - 15.992481203007529 = 38.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1444.9562581265186
      Euclidische afstand: 38.0125802613624
```

Centrumindex 1:

```
54 - 54.156682027649765 = -0.15668202764976513
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 0.44078234831913904
      Euclidische afstand: 0.6639144133991512
          ._____
      Centrumindex 2:
              54 - 31.63235294117647 = 22.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 500.66928585159553
      Euclidische afstand: 22.3756404567913
 ______
{0: 38.0125802613624, 1: 0.6639144133991512, 2: 22.3756404567913}
______
Afstand van bronindex 514 tot...
      Centrumindex 0:
              24 - 15.992481203007529 = 8.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 64.26452880321087
      Euclidische afstand: 8.016516001556466
          ._____
      Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 909.5513814266599
      Euclidische afstand: 30.158769560886597
      Centrumindex 2:
              24 - 31.63235294117647 = -7.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 58.41438389081123
      Euclidische afstand: 7.642930320944397
{0: 8.016516001556466, 1: 30.158769560886597, 2: 7.642930320944397}
   _____
Afstand van bronindex 515 tot...
      Centrumindex 0:
              47 - 15.992481203007529 = 31.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 961.6103934648645
      Euclidische afstand: 31.00984349307272
       _____
      Centrumindex 1:
              47 - 54.156682027649765 = -7.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 51.34400815477069
```

Euclidische afstand: 7.165473337803351

```
Centrumindex 2:
              47 - 31.63235294117647 = 15.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 236.32614859669357
       Euclidische afstand: 15.372903063400015
{0: 31.00984349307272, 1: 7.165473337803351, 2: 15.372903063400015}
Afstand van bronindex 516 tot...
       Centrumindex 0:
              34 - 15.992481203007529 = 18.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 324.6555062468197
       Euclidische afstand: 18.01819930644624
       Centrumindex 1:
              34 - 54.156682027649765 = -20.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 406.70806345430975
       Euclidische afstand: 20.16700432524151
 _____
       Centrumindex 2:
              34 - 31.63235294117647 = 2.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 5.963403498654362
       Euclidische afstand: 2.4420080873441763
{0: 18.01819930644624, 1: 20.16700432524151, 2: 2.4420080873441763}
Afstand van bronindex 517 tot...
       Centrumindex 0:
              31 - 15.992481203007529 = 15.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 225.36979196110548
       Euclidische afstand: 15.012321338191022
       Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 536.3578330395632
       Euclidische afstand: 23.159400532819564
 _____
       Centrumindex 2:
              31 - 31.63235294117647 = -0.632352941176471
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 0.5614427143406386
       Euclidische afstand: 0.7492948113664198
{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}
-----
Afstand van bronindex 518 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 400.6855814347896
       Euclidische afstand: 20.017132198064477
 _____
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 330.0813353437107
       Euclidische afstand: 18.168140668315807
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 19.433991733948478
       Euclidische afstand: 4.408400133149041
  ._____
{0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
_____
Afstand van bronindex 519 tot...
       Centrumindex 0:
              32 - 15.992481203007529 = 16.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 256.38482955509045
      Euclidische afstand: 16.01202140752661
       Centrumindex 1:
              32 - 54.156682027649765 = -22.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 491.0444689842637
       Euclidische afstand: 22.15952321202475
       Centrumindex 2:
              32 - 31.63235294117647 = 0.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 0.2967368319876966
       Euclidische afstand: 0.5447355615229252
  ._____
{0: 16.01202140752661, 1: 22.15952321202475, 2: 0.5447355615229252}
```

```
_____
Afstand van bronindex 520 tot...
       Centrumindex 0:
              30 - 15.992481203007529 = 14.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 196.59535587087993
       Euclidische afstand: 14.021246587621228
       Centrumindex 1:
              30 - 54.156682027649765 = -24.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 583.9615196755078
       Euclidische afstand: 24.16529577049509
  ______
       Centrumindex 2:
              30 - 31.63235294117647 = -1.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 3.02222702806613
       Euclidische afstand: 1.738455356937914
{0: 14.021246587621228, 1: 24.16529577049509, 2: 1.738455356937914}
Afstand van bronindex 521 tot...
       Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 36.234453615240994
       Euclidische afstand: 6.0195060939616125
       Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1034.178109537259
       Euclidische afstand: 32.15863973393867
       Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 92.94379565551712
       Euclidische afstand: 9.640736261070371
  ______
{0: 6.0195060939616125, 1: 32.15863973393867, 2: 9.640736261070371}
_____
Afstand van bronindex 522 tot...
      Centrumindex 0:
```

```
31 - 15.992481203007529 = 15.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 225.36979196110548
       Euclidische afstand: 15.012321338191022
          -----
       Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 536.3578330395632
       Euclidische afstand: 23.159400532819564
          _____
       Centrumindex 2:
              31 - 31.63235294117647 = -0.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 0.5614427143406386
       Euclidische afstand: 0.7492948113664198
   _____
{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}
2
Afstand van bronindex 523 tot...
       Centrumindex 0:
              44 - 15.992481203007529 = 28.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 784.8058821866691
       Euclidische afstand: 28.014387057129575
 _____
       Centrumindex 1:
              44 - 54.156682027649765 = -10.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 103.57442290131443
       Euclidische afstand: 10.177152003449415
       Centrumindex 2:
              44 - 31.63235294117647 = 12.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 153.31634467512495
       Euclidische afstand: 12.382097749376918
{0: 28.014387057129575, 1: 10.177152003449415, 2: 12.382097749376918}
_____
Afstand van bronindex 524 tot...
       Centrumindex 0:
              31 - 15.992481203007529 = 15.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 225.36979196110548
```

Euclidische afstand: 15.012321338191022

```
Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 536.3578330395632
       Euclidische afstand: 23.159400532819564
       Centrumindex 2:
              31 - 31.63235294117647 = -0.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 0.5614427143406386
       Euclidische afstand: 0.7492948113664198
{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}
  ._____
Afstand van bronindex 525 tot...
       Centrumindex 0:
              40 - 15.992481203007529 = 24.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 576.5051303069699
       Euclidische afstand: 24.01052124188415
 _____
       Centrumindex 1:
              40 - 54.156682027649765 = -14.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 200.5375565418674
       Euclidische afstand: 14.161128364006428
        -----
       Centrumindex 2:
              40 - 31.63235294117647 = 8.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 70.17908977316416
       Euclidische afstand: 8.377296089620097
{0: 24.01052124188415, 1: 14.161128364006428, 2: 8.377296089620097}
______
Afstand van bronindex 526 tot...
       Centrumindex 0:
              50 - 15.992481203007529 = 34.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1156.896107750579
       Euclidische afstand: 34.01317550230468
 _____
       Centrumindex 1:
              50 - 54.156682027649765 = -4.156682027649765
```

1 - 0.3548387096774193 = 0.6451612903225807

```
Totale euclidische som: 17.69423856951726
       Euclidische afstand: 4.206452016785317
       Centrumindex 2:
              50 - 31.63235294117647 = 18.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 337.7281093810073
       Euclidische afstand: 18.377380373192675
    -----
{0: 34.01317550230468, 1: 4.206452016785317, 2: 18.377380373192675}
_____
Afstand van bronindex 527 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 841.5803182768947
       Euclidische afstand: 29.010003762097217
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 83.97073626536975
       Euclidische afstand: 9.16355478323613
 ._____
       Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 178.85556036139945
       Euclidische afstand: 13.373689108148113
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
_____
Afstand van bronindex 528 tot...
       Centrumindex 0:
              39 - 15.992481203007529 = 23.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 529.490092712985
       Euclidische afstand: 23.01065172290835
       Centrumindex 1:
              39 - 54.156682027649765 = -15.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 229.85092059716692
       Euclidische afstand: 15.160835089043312
```

Centrumindex 2:

```
39 - 31.63235294117647 = 7.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 54.4437956555171
      Euclidische afstand: 7.378603909651005
 _____
{0: 23.01065172290835, 1: 15.160835089043312, 2: 7.378603909651005}
------
Afstand van bronindex 529 tot...
      Centrumindex 0:
              23 - 15.992481203007529 = 7.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 49.24949120922594
      Euclidische afstand: 7.017798173873764
       -----
      Centrumindex 1:
              23 - 54.156682027649765 = -31.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 970.8647454819594
      Euclidische afstand: 31.158702564162702
          ._____
       Centrumindex 2:
              23 - 31.63235294117647 = -8.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 74.67908977316418
      Euclidische afstand: 8.641706415585071
{0: 7.017798173873764, 1: 31.158702564162702, 2: 8.641706415585071}
_____
Afstand van bronindex 530 tot...
      Centrumindex 0:
              2 - 15.992481203007529 = -13.992481203007529
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 196.17430323930154
      Euclidische afstand: 14.006223732302063
      Centrumindex 1:
              2 - 54.156682027649765 = -52.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 2720.7357132238944
      Euclidische afstand: 52.16067209329165
       .____
      Centrumindex 2:
              2 - 31.63235294117647 = -29.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 878.4339917339486
```

Euclidische afstand: 29.638387131116776

```
{0: 14.006223732302063, 1: 52.16067209329165, 2: 29.638387131116776}
_____
Afstand van bronindex 531 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 841.5803182768947
       Euclidische afstand: 29.010003762097217
          _____
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 83.97073626536975
       Euclidische afstand: 9.16355478323613
  _____
       Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 178.85556036139945
       Euclidische afstand: 13.373689108148113
  ._____
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
_____
Afstand van bronindex 532 tot...
       Centrumindex 0:
              17 - 15.992481203007529 = 1.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1.1592656453162782
       Euclidische afstand: 1.0766919918510949
       Centrumindex 1:
              17 - 54.156682027649765 = -37.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1380.7449298137565
       Euclidische afstand: 37.158376307553546
       Centrumindex 2:
              17 - 31.63235294117647 = -14.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 214.26732506728183
       Euclidische afstand: 14.637872969365523
{0: 1.0766919918510949, 1: 37.158376307553546, 2: 14.637872969365523}
```

-----

```
Afstand van bronindex 533 tot...
       Centrumindex 0:
               45 - 15.992481203007529 = 29.00751879699247
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 841.8209197806541
       Euclidische afstand: 29.0141503370451
       Centrumindex 1:
               45 - 54.156682027649765 = -9.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 84.2610588460149
       Euclidische afstand: 9.179382269304122
       Centrumindex 2:
               45 - 31.63235294117647 = 13.367647058823529
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 179.05163879277202
       Euclidische afstand: 13.381017853391125
{0: 29.0141503370451, 1: 9.179382269304122, 2: 13.381017853391125}
    _____
Afstand van bronindex 534 tot...
       Centrumindex 0:
               30 - 15.992481203007529 = 14.007518796992471
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 196.35475436712053
       Euclidische afstand: 14.012664071015209
        _____
       Centrumindex 1:
               30 - 54.156682027649765 = -24.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 583.6711970948627
       Euclidische afstand: 24.159288008856194
       Centrumindex 2:
               30 - 31.63235294117647 = -1.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.8261485966935807
       Euclidische afstand: 1.681115283582176
{0: 14.012664071015209, 1: 24.159288008856194, 2: 1.681115283582176}
______
Afstand van bronindex 535 tot...
       Centrumindex 0:
               7 - 15.992481203007529 = -8.992481203007529
```

1 - 0.3796992481203007 = 0.6203007518796992

```
Totale euclidische som: 81.24949120922625
       Euclidische afstand: 9.013849965981587
       Centrumindex 1:
              7 - 54.156682027649765 = -47.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 2224.168892947397
       Euclidische afstand: 47.161095120314975
   _____
       Centrumindex 2:
              7 - 31.63235294117647 = -24.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 607.1104623221838
       Euclidische afstand: 24.639611651204728
  ______
{0: 9.013849965981587, 1: 47.161095120314975, 2: 24.639611651204728}
_____
Afstand van bronindex 536 tot...
      Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 841.5803182768947
       Euclidische afstand: 29.010003762097217
 ._____
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 83.97073626536975
       Euclidische afstand: 9.16355478323613
 ._____
       Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 178.85556036139945
       Euclidische afstand: 13.373689108148113
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
Afstand van bronindex 537 tot...
       Centrumindex 0:
              30 - 15.992481203007529 = 14.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 196.59535587087993
       Euclidische afstand: 14.021246587621228
```

Centrumindex 1:

```
30 - 54.156682027649765 = -24.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 583.9615196755078
      Euclidische afstand: 24.16529577049509
         -----
      Centrumindex 2:
             30 - 31.63235294117647 = -1.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 3.02222702806613
      Euclidische afstand: 1.738455356937914
  ______
{0: 14.021246587621228, 1: 24.16529577049509, 2: 1.738455356937914}
______
Afstand van bronindex 538 tot...
      Centrumindex 0:
             45 - 15.992481203007529 = 29.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 841.5803182768947
      Euclidische afstand: 29.010003762097217
          ._____
      Centrumindex 1:
             45 - 54.156682027649765 = -9.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 83.97073626536975
      Euclidische afstand: 9.16355478323613
      Centrumindex 2:
             45 - 31.63235294117647 = 13.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 178.85556036139945
      Euclidische afstand: 13.373689108148113
 _____
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
  -----
Afstand van bronindex 539 tot...
      Centrumindex 0:
             22 - 15.992481203007529 = 6.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 36.47505511900039
      Euclidische afstand: 6.039458180913283
       .____
      Centrumindex 1:
             22 - 54.156682027649765 = -32.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1034.4684321179043
```

Euclidische afstand: 32.16315332982611

```
Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 93.13987408688966
       Euclidische afstand: 9.650900169771194
{0: 6.039458180913283, 1: 32.16315332982611, 2: 9.650900169771194}
Afstand van bronindex 540 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 400.6855814347896
       Euclidische afstand: 20.017132198064477
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 330.0813353437107
       Euclidische afstand: 18.168140668315807
 _____
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 19.433991733948478
       Euclidische afstand: 4.408400133149041
{0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
_____
Afstand van bronindex 541 tot...
       Centrumindex 0:
              9 - 15.992481203007529 = -6.992481203007529
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 49.03896489343674
       Euclidische afstand: 7.002782653591124
       Centrumindex 1:
              9 - 54.156682027649765 = -45.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 2039.2518422561527
       Euclidische afstand: 45.158076157606104
 ._____
       Centrumindex 2:
              9 - 31.63235294117647 = -22.63235294117647
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 512.3849721261054
      Euclidische afstand: 22.635922162043794
{0: 7.002782653591124, 1: 45.158076157606104, 2: 22.635922162043794}
_____
Afstand van bronindex 542 tot...
      Centrumindex 0:
              11 - 15.992481203007529 = -4.992481203007529
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 25.069040081406623
      Euclidische afstand: 5.00689924817812
 _____
      Centrumindex 1:
              11 - 54.156682027649765 = -43.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1862.6251141455537
      Euclidische afstand: 43.15814076330853
      Centrumindex 2:
              11 - 31.63235294117647 = -20.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 425.8555603613995
      Euclidische afstand: 20.636268082223577
  ._____
{0: 5.00689924817812, 1: 43.15814076330853, 2: 20.636268082223577}
_____
Afstand van bronindex 543 tot...
      Centrumindex 0:
              32 - 15.992481203007529 = 16.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 256.6254310588498
      Euclidische afstand: 16.01953279777066
      Centrumindex 1:
              32 - 54.156682027649765 = -22.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 491.3347915649088
      Euclidische afstand: 22.166072984741994
      Centrumindex 2:
              32 - 31.63235294117647 = 0.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 0.49281526336024584
      Euclidische afstand: 0.7020080222905191
  .-----
```

{0: 16.01953279777066, 1: 22.166072984741994, 2: 0.7020080222905191}

```
_____
Afstand van bronindex 544 tot...
       Centrumindex 0:
              50 - 15.992481203007529 = 34.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1156.6555062468194
       Euclidische afstand: 34.009638431580235
       Centrumindex 1:
              50 - 54.156682027649765 = -4.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 17.4039159888721
       Euclidische afstand: 4.171800089754074
       ______
       Centrumindex 2:
              50 - 31.63235294117647 = 18.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 337.53203094963476
       Euclidische afstand: 18.372044822219294
{0: 34.009638431580235, 1: 4.171800089754074, 2: 18.372044822219294}
Afstand van bronindex 545 tot...
       Centrumindex 0:
              64 - 15.992481203007529 = 48.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 2304.8660325626083
       Euclidische afstand: 48.00902032496194
       Centrumindex 1:
              64 - 54.156682027649765 = 9.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 97.01681921467868
       Euclidische afstand: 9.849711631041727
       Centrumindex 2:
              64 - 31.63235294117647 = 32.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 1047.8261485966937
       Euclidische afstand: 32.37014285721788
 _____
{0: 48.00902032496194, 1: 9.849711631041727, 2: 32.37014285721788}
_____
Afstand van bronindex 546 tot...
      Centrumindex 0:
```

```
19 - 15.992481203007529 = 3.0075187969924713
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 9.429942337045562
       Euclidische afstand: 3.0708211177217017
          -----
       Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1236.4085242838028
       Euclidische afstand: 35.16260121611885
       _____
       Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 159.93399173394852
       Euclidische afstand: 12.64650116569593
   _____
{0: 3.0708211177217017, 1: 35.16260121611885, 2: 12.64650116569593}
Afstand van bronindex 547 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 841.8209197806541
       Euclidische afstand: 29.0141503370451
 _____
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 84.2610588460149
       Euclidische afstand: 9.179382269304122
       Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 179.05163879277202
       Euclidische afstand: 13.381017853391125
{0: 29.0141503370451, 1: 9.179382269304122, 2: 13.381017853391125}
_____
Afstand van bronindex 548 tot...
       Centrumindex 0:
              33 - 15.992481203007529 = 17.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 289.39986714907536
```

Euclidische afstand: 17.011756733185297

```
Centrumindex 1:
              33 - 54.156682027649765 = -21.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 447.73110492896416
       Euclidische afstand: 21.15965748609755
       Centrumindex 2:
              33 - 31.63235294117647 = 1.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.0320309496347546
       Euclidische afstand: 1.4254932303012717
{0: 17.011756733185297, 1: 21.15965748609755, 2: 1.4254932303012717}
  _____
Afstand van bronindex 549 tot...
       Centrumindex 0:
              8 - 15.992481203007529 = -7.992481203007529
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 64.26452880321119
       Euclidische afstand: 8.016516001556486
 ______
       Centrumindex 1:
              8 - 54.156682027649765 = -46.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 2130.8555288920975
       Euclidische afstand: 46.16119072220838
        ______
       Centrumindex 2:
              8 - 31.63235294117647 = -23.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 558.8457564398309
       Euclidische afstand: 23.639918706286426
{0: 8.016516001556486, 1: 46.16119072220838, 2: 23.639918706286426}
_____
Afstand van bronindex 550 tot...
       Centrumindex 0:
              17 - 15.992481203007529 = 1.0075187969924713
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1.3998671490756767
       Euclidische afstand: 1.183159815526067
 ._____
       Centrumindex 1:
              17 - 54.156682027649765 = -37.156682027649765
```

1 - 0.3548387096774193 = 0.6451612903225807

```
Totale euclidische som: 1381.0352523944018
       Euclidische afstand: 37.16228265855586
       Centrumindex 2:
              17 - 31.63235294117647 = -14.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 214.4634034986544
       Euclidische afstand: 14.644569078626192
     -----
{0: 1.183159815526067, 1: 37.16228265855586, 2: 14.644569078626192}
_____
Afstand van bronindex 551 tot...
       Centrumindex 0:
              27 - 15.992481203007529 = 11.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 121.30964158516569
       Euclidische afstand: 11.014065624698524
       Centrumindex 1:
              27 - 54.156682027649765 = -27.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 737.6112892607613
       Euclidische afstand: 27.159000152081468
 ._____
       Centrumindex 2:
              27 - 31.63235294117647 = -4.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 21.620266243752408
       Euclidische afstand: 4.649759804952553
{0: 11.014065624698524, 1: 27.159000152081468, 2: 4.649759804952553}
_____
Afstand van bronindex 552 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 841.5803182768947
       Euclidische afstand: 29.010003762097217
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 83.97073626536975
       Euclidische afstand: 9.16355478323613
```

Centrumindex 2:

```
45 - 31.63235294117647 = 13.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 178.85556036139945
       Euclidische afstand: 13.373689108148113
  _____
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
._____
Afstand van bronindex 553 tot...
       Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 36.47505511900039
       Euclidische afstand: 6.039458180913283
       -----
       Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1034.4684321179043
      Euclidische afstand: 32.16315332982611
       Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 93.13987408688966
       Euclidische afstand: 9.650900169771194
{0: 6.039458180913283, 1: 32.16315332982611, 2: 9.650900169771194}
_____
Afstand van bronindex 554 tot...
       Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 36.47505511900039
      Euclidische afstand: 6.039458180913283
       Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1034.4684321179043
      Euclidische afstand: 32.16315332982611
       .____
       Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 93.13987408688966
```

Euclidische afstand: 9.650900169771194

```
{0: 6.039458180913283, 1: 32.16315332982611, 2: 9.650900169771194}
_____
Afstand van bronindex 555 tot...
      Centrumindex 0:
             62 - 15.992481203007529 = 46.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 2116.835957374639
      Euclidische afstand: 46.009085595941144
          ._____
      Centrumindex 1:
             62 - 54.156682027649765 = 7.843317972350235
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 61.64354732527774
      Euclidische afstand: 7.85134047951544
 _____
      Centrumindex 2:
             62 - 31.63235294117647 = 30.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 922.3555603613994
      Euclidische afstand: 30.370307215459633
   _____
{0: 46.009085595941144, 1: 7.85134047951544, 2: 30.370307215459633}
Afstand van bronindex 556 tot...
      Centrumindex 0:
             48 - 15.992481203007529 = 32.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1024.866032562609
      Euclidische afstand: 32.01352889892973
      Centrumindex 1:
             48 - 54.156682027649765 = -6.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 38.32096668011632
      Euclidische afstand: 6.190393095766724
      Centrumindex 2:
             48 - 31.63235294117647 = 16.36764705882353
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 268.2575211457132
      Euclidische afstand: 16.37856895903037
   _____
{0: 32.01352889892973, 1: 6.190393095766724, 2: 16.37856895903037}
```

```
Afstand van bronindex 557 tot...
       Centrumindex 0:
               45 - 15.992481203007529 = 29.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 841.5803182768947
       Euclidische afstand: 29.010003762097217
       Centrumindex 1:
               45 - 54.156682027649765 = -9.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 83.97073626536975
       Euclidische afstand: 9.16355478323613
       Centrumindex 2:
               45 - 31.63235294117647 = 13.367647058823529
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 178.85556036139945
       Euclidische afstand: 13.373689108148113
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
    _____
Afstand van bronindex 558 tot...
       Centrumindex 0:
               39 - 15.992481203007529 = 23.00751879699247
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 529.7306942167444
       Euclidische afstand: 23.01587917540289
        ._____
       Centrumindex 1:
               39 - 54.156682027649765 = -15.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 230.1412431778121
       Euclidische afstand: 15.170406823081974
       Centrumindex 2:
               39 - 31.63235294117647 = 7.367647058823529
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 54.63987408688965
       Euclidische afstand: 7.391878928045943
{0: 23.01587917540289, 1: 15.170406823081974, 2: 7.391878928045943}
______
Afstand van bronindex 559 tot...
       Centrumindex 0:
               36 - 15.992481203007529 = 20.00751879699247
```

1 - 0.3796992481203007 = 0.6203007518796992

```
Totale euclidische som: 400.6855814347896
       Euclidische afstand: 20.017132198064477
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 330.0813353437107
       Euclidische afstand: 18.168140668315807
  -----
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 19.433991733948478
       Euclidische afstand: 4.408400133149041
  -----
{0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
_____
Afstand van bronindex 560 tot...
      Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 841.5803182768947
       Euclidische afstand: 29.010003762097217
 ._____
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 83.97073626536975
       Euclidische afstand: 9.16355478323613
 ._____
       Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 178.85556036139945
       Euclidische afstand: 13.373689108148113
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
Afstand van bronindex 561 tot...
       Centrumindex 0:
              40 - 15.992481203007529 = 24.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 576.5051303069699
       Euclidische afstand: 24.01052124188415
```

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Centrumindex 1:

```
40 - 54.156682027649765 = -14.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 200.5375565418674
      Euclidische afstand: 14.161128364006428
         -----
      Centrumindex 2:
             40 - 31.63235294117647 = 8.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 70.17908977316416
      Euclidische afstand: 8.377296089620097
 _____
{0: 24.01052124188415, 1: 14.161128364006428, 2: 8.377296089620097}
______
Afstand van bronindex 562 tot...
      Centrumindex 0:
             28 - 15.992481203007529 = 12.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 144.32467917915065
      Euclidische afstand: 12.013520682096097
         ._____
      Centrumindex 1:
             28 - 54.156682027649765 = -26.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 684.2979252054618
      Euclidische afstand: 26.1590887686376
 _____
      Centrumindex 2:
             28 - 31.63235294117647 = -3.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 13.355560361399464
      Euclidische afstand: 3.6545260104970474
 -----
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
  _____
Afstand van bronindex 563 tot...
      Centrumindex 0:
             45 - 15.992481203007529 = 29.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 841.5803182768947
      Euclidische afstand: 29.010003762097217
       ._____
      Centrumindex 1:
             45 - 54.156682027649765 = -9.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 83.97073626536975
```

Euclidische afstand: 9.16355478323613

```
Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 178.85556036139945
       Euclidische afstand: 13.373689108148113
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
Afstand van bronindex 564 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 841.5803182768947
       Euclidische afstand: 29.010003762097217
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 83.97073626536975
       Euclidische afstand: 9.16355478323613
 _____
       Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 178.85556036139945
       Euclidische afstand: 13.373689108148113
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
Afstand van bronindex 565 tot...
       Centrumindex 0:
              24 - 15.992481203007529 = 8.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 64.26452880321087
       Euclidische afstand: 8.016516001556466
       Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 909.5513814266599
       Euclidische afstand: 30.158769560886597
 ._____
       Centrumindex 2:
              24 - 31.63235294117647 = -7.632352941176471
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 58.41438389081123
       Euclidische afstand: 7.642930320944397
{0: 8.016516001556466, 1: 30.158769560886597, 2: 7.642930320944397}
-----
Afstand van bronindex 566 tot...
       Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 9.189340833286163
       Euclidische afstand: 3.031392556777522
       Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1236.1182017031574
       Euclidische afstand: 35.15847268729342
       Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 159.73791330257595
       Euclidische afstand: 12.638746508359757
  ._____
{0: 3.031392556777522, 1: 35.15847268729342, 2: 12.638746508359757}
_____
Afstand van bronindex 567 tot...
       Centrumindex 0:
              29 - 15.992481203007529 = 13.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 169.3397167731356
      Euclidische afstand: 13.013059470129829
       Centrumindex 1:
              29 - 54.156682027649765 = -25.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 632.9845611501622
       Euclidische afstand: 25.15918442935228
       Centrumindex 2:
              29 - 31.63235294117647 = -2.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 7.090854479046523
       Euclidische afstand: 2.662865839475681
  ._____
```

{0: 13.013059470129829, 1: 25.15918442935228, 2: 2.662865839475681}

```
_____
Afstand van bronindex 568 tot...
      Centrumindex 0:
             45 - 15.992481203007529 = 29.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 841.5803182768947
      Euclidische afstand: 29.010003762097217
  _____
      Centrumindex 1:
             45 - 54.156682027649765 = -9.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 83.97073626536975
      Euclidische afstand: 9.16355478323613
       ______
      Centrumindex 2:
             45 - 31.63235294117647 = 13.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 178.85556036139945
      Euclidische afstand: 13.373689108148113
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
Afstand van bronindex 569 tot...
      Centrumindex 0:
             32 - 15.992481203007529 = 16.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 256.6254310588498
      Euclidische afstand: 16.01953279777066
 ._____
      Centrumindex 1:
             32 - 54.156682027649765 = -22.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 491.3347915649088
      Euclidische afstand: 22.166072984741994
      Centrumindex 2:
             32 - 31.63235294117647 = 0.367647058823529
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 0.49281526336024584
      Euclidische afstand: 0.7020080222905191
 _____
{0: 16.01953279777066, 1: 22.166072984741994, 2: 0.7020080222905191}
_____
Afstand van bronindex 570 tot...
      Centrumindex 0:
```

```
62 - 15.992481203007529 = 46.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 2117.0765588783984
       Euclidische afstand: 46.011700238943554
          -----
       Centrumindex 1:
              62 - 54.156682027649765 = 7.843317972350235
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 61.9338699059229
       Euclidische afstand: 7.869807488491881
 _____
       Centrumindex 2:
              62 - 31.63235294117647 = 30.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 922.551638792772
       Euclidische afstand: 30.37353517114483
    -----
{0: 46.011700238943554, 1: 7.869807488491881, 2: 30.37353517114483}
Afstand van bronindex 571 tot...
       Centrumindex 0:
              53 - 15.992481203007529 = 37.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1369.9412205325336
       Euclidische afstand: 37.012717010948194
 _____
       Centrumindex 1:
              53 - 54.156682027649765 = -1.1566820276497651
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1.7541464036186694
       Euclidische afstand: 1.324441921572505
       Centrumindex 2:
              53 - 31.63235294117647 = 21.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 456.93399173394846
       Euclidische afstand: 21.376014402454647
{0: 37.012717010948194, 1: 1.324441921572505, 2: 21.376014402454647}
______
Afstand van bronindex 572 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 400.6855814347896
```

Euclidische afstand: 20.017132198064477

```
Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 330.0813353437107
       Euclidische afstand: 18.168140668315807
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 19.433991733948478
       Euclidische afstand: 4.408400133149041
{0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
  -----
Afstand van bronindex 573 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 841.8209197806541
       Euclidische afstand: 29.0141503370451
 _____
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 84.2610588460149
       Euclidische afstand: 9.179382269304122
        ______
       Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 179.05163879277202
       Euclidische afstand: 13.381017853391125
{0: 29.0141503370451, 1: 9.179382269304122, 2: 13.381017853391125}
_____
Afstand van bronindex 574 tot...
       Centrumindex 0:
              16 - 15.992481203007529 = 0.007518796992471266
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 0.14422805133133568
       Euclidische afstand: 0.3797736843586397
 ._____
       Centrumindex 1:
              16 - 54.156682027649765 = -38.156682027649765
```

0 - 0.3548387096774193 = -0.3548387096774193

```
Totale euclidische som: 1456.0582938690561
      Euclidische afstand: 38.15833190626991
      Centrumindex 2:
              16 - 31.63235294117647 = -15.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 244.53203094963476
      Euclidische afstand: 15.637519974396028
      ._____
{0: 0.3797736843586397, 1: 38.15833190626991, 2: 15.637519974396028}
_____
Afstand van bronindex 575 tot...
      Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 9.189340833286163
      Euclidische afstand: 3.031392556777522
      Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1236.1182017031574
      Euclidische afstand: 35.15847268729342
 ._____
       Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 159.73791330257595
       Euclidische afstand: 12.638746508359757
   -----
{0: 3.031392556777522, 1: 35.15847268729342, 2: 12.638746508359757}
_____
Afstand van bronindex 576 tot...
      Centrumindex 0:
              34 - 15.992481203007529 = 18.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 324.6555062468197
      Euclidische afstand: 18.01819930644624
      Centrumindex 1:
              34 - 54.156682027649765 = -20.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 406.70806345430975
      Euclidische afstand: 20.16700432524151
```

~=

Centrumindex 2:

```
34 - 31.63235294117647 = 2.367647058823529
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 5.963403498654362
      Euclidische afstand: 2.4420080873441763
  _____
{0: 18.01819930644624, 1: 20.16700432524151, 2: 2.4420080873441763}
-------
Afstand van bronindex 577 tot...
      Centrumindex 0:
             39 - 15.992481203007529 = 23.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 529.7306942167444
      Euclidische afstand: 23.01587917540289
       -----
      Centrumindex 1:
             39 - 54.156682027649765 = -15.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 230.1412431778121
      Euclidische afstand: 15.170406823081974
          ._____
      Centrumindex 2:
             39 - 31.63235294117647 = 7.367647058823529
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 54.63987408688965
      Euclidische afstand: 7.391878928045943
 _____
{0: 23.01587917540289, 1: 15.170406823081974, 2: 7.391878928045943}
_____
Afstand van bronindex 578 tot...
      Centrumindex 0:
             45 - 15.992481203007529 = 29.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 841.5803182768947
      Euclidische afstand: 29.010003762097217
      Centrumindex 1:
             45 - 54.156682027649765 = -9.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 83.97073626536975
      Euclidische afstand: 9.16355478323613
       .____
      Centrumindex 2:
             45 - 31.63235294117647 = 13.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 178.85556036139945
```

Euclidische afstand: 13.373689108148113

```
\{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113\}
_____
Afstand van bronindex 579 tot...
      Centrumindex 0:
             32 - 15.992481203007529 = 16.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 256.6254310588498
      Euclidische afstand: 16.01953279777066
          _____
      Centrumindex 1:
             32 - 54.156682027649765 = -22.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 491.3347915649088
      Euclidische afstand: 22.166072984741994
 ______
      Centrumindex 2:
             32 - 31.63235294117647 = 0.367647058823529
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 0.49281526336024584
      Euclidische afstand: 0.7020080222905191
  _____
{0: 16.01953279777066, 1: 22.166072984741994, 2: 0.7020080222905191}
_____
Afstand van bronindex 580 tot...
      Centrumindex 0:
             25 - 15.992481203007529 = 9.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 81.52016790095522
      Euclidische afstand: 9.028851970264837
      Centrumindex 1:
             25 - 54.156682027649765 = -29.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 850.5283399520055
      Euclidische afstand: 29.1638190220692
      Centrumindex 2:
             25 - 31.63235294117647 = -6.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 44.345756439830836
      Euclidische afstand: 6.659260952976001
    _____
{0: 9.028851970264837, 1: 29.1638190220692, 2: 6.659260952976001}
```

```
Afstand van bronindex 581 tot...
       Centrumindex 0:
               39 - 15.992481203007529 = 23.00751879699247
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 529.7306942167444
       Euclidische afstand: 23.01587917540289
       Centrumindex 1:
               39 - 54.156682027649765 = -15.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 230.1412431778121
       Euclidische afstand: 15.170406823081974
       Centrumindex 2:
               39 - 31.63235294117647 = 7.367647058823529
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 54.63987408688965
       Euclidische afstand: 7.391878928045943
{0: 23.01587917540289, 1: 15.170406823081974, 2: 7.391878928045943}
    _____
Afstand van bronindex 582 tot...
       Centrumindex 0:
               54 - 15.992481203007529 = 38.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1444.715656622759
       Euclidische afstand: 38.009415368073725
        ._____
       Centrumindex 1:
               54 - 54.156682027649765 = -0.15668202764976513
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 0.15045976767397765
       Euclidische afstand: 0.38789143800034775
       Centrumindex 2:
               54 - 31.63235294117647 = 22.36764705882353
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 500.473207420223
       Euclidische afstand: 22.371258512212115
{0: 38.009415368073725, 1: 0.38789143800034775, 2: 22.371258512212115}
______
Afstand van bronindex 583 tot...
       Centrumindex 0:
               36 - 15.992481203007529 = 20.00751879699247
```

0 - 0.3796992481203007 = -0.3796992481203007

```
Totale euclidische som: 400.4449799310302
       Euclidische afstand: 20.011121406133896
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 329.79101276306557
       Euclidische afstand: 18.160149029208586
   _____
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 19.23791330257593
       Euclidische afstand: 4.386104570410506
  -----
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
_____
Afstand van bronindex 584 tot...
      Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 841.5803182768947
       Euclidische afstand: 29.010003762097217
 ._____
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 83.97073626536975
       Euclidische afstand: 9.16355478323613
 ._____
       Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 178.85556036139945
       Euclidische afstand: 13.373689108148113
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
Afstand van bronindex 585 tot...
       Centrumindex 0:
              18 - 15.992481203007529 = 2.0075187969924713
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 4.414904743060619
       Euclidische afstand: 2.1011674714454864
```

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Centrumindex 1:

```
18 - 54.156682027649765 = -36.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1307.7218883391024
      Euclidische afstand: 36.16243753315175
          ._____
      Centrumindex 2:
             18 - 31.63235294117647 = -13.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 186.19869761630144
      Euclidische afstand: 13.645464360596215
  _____
{0: 2.1011674714454864, 1: 36.16243753315175, 2: 13.645464360596215}
______
Afstand van bronindex 586 tot...
      Centrumindex 0:
             47 - 15.992481203007529 = 31.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 961.6103934648645
      Euclidische afstand: 31.00984349307272
          ._____
      Centrumindex 1:
             47 - 54.156682027649765 = -7.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 51.34400815477069
      Euclidische afstand: 7.165473337803351
      Centrumindex 2:
             47 - 31.63235294117647 = 15.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 236.32614859669357
      Euclidische afstand: 15.372903063400015
  _____
{0: 31.00984349307272, 1: 7.165473337803351, 2: 15.372903063400015}
  -----
Afstand van bronindex 587 tot...
      Centrumindex 0:
             60 - 15.992481203007529 = 44.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1937.0464836904282
      Euclidische afstand: 44.01189025354885
       ._____
      Centrumindex 1:
             60 - 54.156682027649765 = 5.843317972350235
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 34.56059801652196
```

Euclidische afstand: 5.878826244797677

```
Centrumindex 2:
              60 - 31.63235294117647 = 28.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 805.0810505574779
       Euclidische afstand: 28.3739502106682
{0: 44.01189025354885, 1: 5.878826244797677, 2: 28.3739502106682}
Afstand van bronindex 588 tot...
       Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 36.234453615240994
       Euclidische afstand: 6.0195060939616125
       Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1034.178109537259
       Euclidische afstand: 32.15863973393867
 _____
       Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 92.94379565551712
       Euclidische afstand: 9.640736261070371
{0: 6.0195060939616125, 1: 32.15863973393867, 2: 9.640736261070371}
_____
Afstand van bronindex 589 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 841.5803182768947
       Euclidische afstand: 29.010003762097217
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 83.97073626536975
       Euclidische afstand: 9.16355478323613
 _____
       Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 178.85556036139945
      Euclidische afstand: 13.373689108148113
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
-----
Afstand van bronindex 590 tot...
       Centrumindex 0:
              35 - 15.992481203007529 = 19.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 361.42994233704525
      Euclidische afstand: 19.01131090527545
 _____
       Centrumindex 1:
              35 - 54.156682027649765 = -19.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 367.1043768183651
      Euclidische afstand: 19.15996807978461
      Centrumindex 2:
              35 - 31.63235294117647 = 3.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 11.50261918492887
      Euclidische afstand: 3.391551147326083
  ._____
{0: 19.01131090527545, 1: 19.15996807978461, 2: 3.391551147326083}
_____
Afstand van bronindex 591 tot...
      Centrumindex 0:
              52 - 15.992481203007529 = 36.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1296.9261829385487
      Euclidische afstand: 36.01286135450152
      Centrumindex 1:
              52 - 54.156682027649765 = -2.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 5.0675104589182
      Euclidische afstand: 2.2511131599540257
      Centrumindex 2:
              52 - 31.63235294117647 = 20.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 415.19869761630144
      Euclidische afstand: 20.376425045044126
  .....
```

{0: 36.01286135450152, 1: 2.2511131599540257, 2: 20.376425045044126}

```
_____
Afstand van bronindex 592 tot...
       Centrumindex 0:
              47 - 15.992481203007529 = 31.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 961.6103934648645
       Euclidische afstand: 31.00984349307272
       Centrumindex 1:
              47 - 54.156682027649765 = -7.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 51.34400815477069
       Euclidische afstand: 7.165473337803351
  ______
       Centrumindex 2:
              47 - 31.63235294117647 = 15.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 236.32614859669357
       Euclidische afstand: 15.372903063400015
{0: 31.00984349307272, 1: 7.165473337803351, 2: 15.372903063400015}
Afstand van bronindex 593 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 841.5803182768947
       Euclidische afstand: 29.010003762097217
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 83.97073626536975
       Euclidische afstand: 9.16355478323613
       Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 178.85556036139945
       Euclidische afstand: 13.373689108148113
 _____
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
_____
Afstand van bronindex 594 tot...
      Centrumindex 0:
```

```
37 - 15.992481203007529 = 21.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 441.46001752501513
       Euclidische afstand: 21.01094994342272
          -----
       Centrumindex 1:
              37 - 54.156682027649765 = -17.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 294.47764870776604
       Euclidische afstand: 17.16035106598248
          _____
       Centrumindex 2:
              37 - 31.63235294117647 = 5.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 28.973207420222987
       Euclidische afstand: 5.382676603718915
   _____
{0: 21.01094994342272, 1: 17.16035106598248, 2: 5.382676603718915}
2
Afstand van bronindex 595 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 400.4449799310302
       Euclidische afstand: 20.011121406133896
 _____
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 329.79101276306557
       Euclidische afstand: 18.160149029208586
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 19.23791330257593
       Euclidische afstand: 4.386104570410506
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
_____
Afstand van bronindex 596 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 841.8209197806541
```

Euclidische afstand: 29.0141503370451

```
Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 84.2610588460149
       Euclidische afstand: 9.179382269304122
       Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 179.05163879277202
       Euclidische afstand: 13.381017853391125
{0: 29.0141503370451, 1: 9.179382269304122, 2: 13.381017853391125}
   -----
Afstand van bronindex 597 tot...
       Centrumindex 0:
              49 - 15.992481203007529 = 33.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1089.6404686528344
       Euclidische afstand: 33.009702644114114
 ______
       Centrumindex 1:
              49 - 54.156682027649765 = -5.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 26.71728004417163
       Euclidische afstand: 5.1688760910058225
        ______
       Centrumindex 2:
              49 - 31.63235294117647 = 17.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 301.7967368319877
       Euclidische afstand: 17.37229797211606
{0: 33.009702644114114, 1: 5.1688760910058225, 2: 17.37229797211606}
______
Afstand van bronindex 598 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 841.5803182768947
       Euclidische afstand: 29.010003762097217
 ._____
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
```

```
Totale euclidische som: 83.97073626536975
       Euclidische afstand: 9.16355478323613
      Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 178.85556036139945
      Euclidische afstand: 13.373689108148113
     -----
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
_____
Afstand van bronindex 599 tot...
      Centrumindex 0:
              49 - 15.992481203007529 = 33.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1089.881070156594
      Euclidische afstand: 33.01334684876094
      Centrumindex 1:
              49 - 54.156682027649765 = -5.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 27.00760262481679
      Euclidische afstand: 5.1968839341298345
 ._____
       Centrumindex 2:
              49 - 31.63235294117647 = 17.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 301.9928152633602
       Euclidische afstand: 17.37794047818556
   _____
{0: 33.01334684876094, 1: 5.1968839341298345, 2: 17.37794047818556}
_____
Afstand van bronindex 600 tot...
      Centrumindex 0:
              24 - 15.992481203007529 = 8.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 64.50513030697027
      Euclidische afstand: 8.031508594714337
      Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 909.841704007305
      Euclidische afstand: 30.163582413355762
```

Centrumindex 2:

```
24 - 31.63235294117647 = -7.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 58.61046232218378
      Euclidische afstand: 7.655747012681635
 _____
{0: 8.031508594714337, 1: 30.163582413355762, 2: 7.655747012681635}
-------
Afstand van bronindex 601 tot...
      Centrumindex 0:
             45 - 15.992481203007529 = 29.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 841.5803182768947
      Euclidische afstand: 29.010003762097217
       ._____
      Centrumindex 1:
             45 - 54.156682027649765 = -9.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 83.97073626536975
      Euclidische afstand: 9.16355478323613
          ._____
      Centrumindex 2:
             45 - 31.63235294117647 = 13.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 178.85556036139945
      Euclidische afstand: 13.373689108148113
 _____
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
_____
Afstand van bronindex 602 tot...
      Centrumindex 0:
             45 - 15.992481203007529 = 29.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 841.5803182768947
      Euclidische afstand: 29.010003762097217
      Centrumindex 1:
             45 - 54.156682027649765 = -9.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 83.97073626536975
      Euclidische afstand: 9.16355478323613
       -----
      Centrumindex 2:
             45 - 31.63235294117647 = 13.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 178.85556036139945
```

Euclidische afstand: 13.373689108148113

```
\{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113\}
_____
Afstand van bronindex 603 tot...
       Centrumindex 0:
              44 - 15.992481203007529 = 28.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 784.5652806829097
       Euclidische afstand: 28.010092479013878
          -----
       Centrumindex 1:
              44 - 54.156682027649765 = -10.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 103.28410032066928
       Euclidische afstand: 10.1628785450122
 ______
       Centrumindex 2:
              44 - 31.63235294117647 = 12.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 153.12026624375238
       Euclidische afstand: 12.37417739664954
  -----
{0: 28.010092479013878, 1: 10.1628785450122, 2: 12.37417739664954}
_____
Afstand van bronindex 604 tot...
       Centrumindex 0:
              35 - 15.992481203007529 = 19.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 361.6705438408046
       Euclidische afstand: 19.017637704005317
       Centrumindex 1:
              35 - 54.156682027649765 = -19.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 367.3946993990102
       Euclidische afstand: 19.16754286284526
       Centrumindex 2:
              35 - 31.63235294117647 = 3.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 11.69869761630142
       Euclidische afstand: 3.420335892321311
{0: 19.017637704005317, 1: 19.16754286284526, 2: 3.420335892321311}
```

\_\_\_\_\_

```
Afstand van bronindex 605 tot...
       Centrumindex 0:
               36 - 15.992481203007529 = 20.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 400.4449799310302
       Euclidische afstand: 20.011121406133896
       Centrumindex 1:
               36 - 54.156682027649765 = -18.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 329.79101276306557
       Euclidische afstand: 18.160149029208586
       Centrumindex 2:
               36 - 31.63235294117647 = 4.367647058823529
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 19.23791330257593
       Euclidische afstand: 4.386104570410506
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
    _____
Afstand van bronindex 606 tot...
       Centrumindex 0:
               30 - 15.992481203007529 = 14.007518796992471
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 196.35475436712053
       Euclidische afstand: 14.012664071015209
        _____
       Centrumindex 1:
               30 - 54.156682027649765 = -24.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 583.6711970948627
       Euclidische afstand: 24.159288008856194
       Centrumindex 2:
               30 - 31.63235294117647 = -1.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.8261485966935807
       Euclidische afstand: 1.681115283582176
{0: 14.012664071015209, 1: 24.159288008856194, 2: 1.681115283582176}
______
Afstand van bronindex 607 tot...
       Centrumindex 0:
               27 - 15.992481203007529 = 11.007518796992471
```

1 - 0.3796992481203007 = 0.6203007518796992

```
Totale euclidische som: 121.5502430889251
       Euclidische afstand: 11.02498267975624
       Centrumindex 1:
              27 - 54.156682027649765 = -27.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 737.9016118414064
       Euclidische afstand: 27.16434449496999
   _____
       Centrumindex 2:
              27 - 31.63235294117647 = -4.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 21.816344675124956
       Euclidische afstand: 4.67079700641389
  _____
{0: 11.02498267975624, 1: 27.16434449496999, 2: 4.67079700641389}
_____
Afstand van bronindex 608 tot...
      Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 36.47505511900039
       Euclidische afstand: 6.039458180913283
 ._____
       Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1034.4684321179043
       Euclidische afstand: 32.16315332982611
 ._____
       Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 93.13987408688966
       Euclidische afstand: 9.650900169771194
{0: 6.039458180913283, 1: 32.16315332982611, 2: 9.650900169771194}
Afstand van bronindex 609 tot...
       Centrumindex 0:
              40 - 15.992481203007529 = 24.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 576.7457318107294
       Euclidische afstand: 24.015531054105995
```

Centrumindex 1:

```
40 - 54.156682027649765 = -14.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 200.82787912251257
      Euclidische afstand: 14.171375343364263
         -----
      Centrumindex 2:
             40 - 31.63235294117647 = 8.367647058823529
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 70.3751682045367
      Euclidische afstand: 8.38899089310131
  _____
{0: 24.015531054105995, 1: 14.171375343364263, 2: 8.38899089310131}
______
Afstand van bronindex 610 tot...
      Centrumindex 0:
             39 - 15.992481203007529 = 23.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 529.490092712985
      Euclidische afstand: 23.01065172290835
          ._____
      Centrumindex 1:
             39 - 54.156682027649765 = -15.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 229.85092059716692
      Euclidische afstand: 15.160835089043312
      Centrumindex 2:
             39 - 31.63235294117647 = 7.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 54.4437956555171
      Euclidische afstand: 7.378603909651005
 _____
{0: 23.01065172290835, 1: 15.160835089043312, 2: 7.378603909651005}
  _____
Afstand van bronindex 611 tot...
      Centrumindex 0:
             45 - 15.992481203007529 = 29.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 841.5803182768947
      Euclidische afstand: 29.010003762097217
       ._____
      Centrumindex 1:
             45 - 54.156682027649765 = -9.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 83.97073626536975
```

Euclidische afstand: 9.16355478323613

```
Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 178.85556036139945
       Euclidische afstand: 13.373689108148113
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
Afstand van bronindex 612 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 841.8209197806541
       Euclidische afstand: 29.0141503370451
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 84.2610588460149
       Euclidische afstand: 9.179382269304122
 _____
       Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 179.05163879277202
       Euclidische afstand: 13.381017853391125
{0: 29.0141503370451, 1: 9.179382269304122, 2: 13.381017853391125}
Afstand van bronindex 613 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 841.5803182768947
       Euclidische afstand: 29.010003762097217
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 83.97073626536975
       Euclidische afstand: 9.16355478323613
 _____
       Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 178.85556036139945
      Euclidische afstand: 13.373689108148113
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
-----
Afstand van bronindex 614 tot...
       Centrumindex 0:
              35 - 15.992481203007529 = 19.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 361.42994233704525
      Euclidische afstand: 19.01131090527545
 _____
       Centrumindex 1:
              35 - 54.156682027649765 = -19.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 367.1043768183651
      Euclidische afstand: 19.15996807978461
      Centrumindex 2:
              35 - 31.63235294117647 = 3.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 11.50261918492887
      Euclidische afstand: 3.391551147326083
  ._____
{0: 19.01131090527545, 1: 19.15996807978461, 2: 3.391551147326083}
_____
Afstand van bronindex 615 tot...
      Centrumindex 0:
              24 - 15.992481203007529 = 8.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 64.50513030697027
      Euclidische afstand: 8.031508594714337
      Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 909.841704007305
      Euclidische afstand: 30.163582413355762
      Centrumindex 2:
              24 - 31.63235294117647 = -7.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 58.61046232218378
      Euclidische afstand: 7.655747012681635
  .-----
```

{0: 8.031508594714337, 1: 30.163582413355762, 2: 7.655747012681635}

```
Afstand van bronindex 616 tot...
       Centrumindex 0:
              34 - 15.992481203007529 = 18.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 324.41490474306033
       Euclidische afstand: 18.011521444427185
   _____
       Centrumindex 1:
              34 - 54.156682027649765 = -20.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 406.4177408736646
       Euclidische afstand: 20.159805080249775
       ______
       Centrumindex 2:
              34 - 31.63235294117647 = 2.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 5.767325067281813
       Euclidische afstand: 2.401525570815729
{0: 18.011521444427185, 1: 20.159805080249775, 2: 2.401525570815729}
Afstand van bronindex 617 tot...
       Centrumindex 0:
              26 - 15.992481203007529 = 10.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 100.29460399118075
       Euclidische afstand: 10.014719366571425
       Centrumindex 1:
              26 - 54.156682027649765 = -28.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 792.9246533160608
       Euclidische afstand: 28.15891782927854
       Centrumindex 2:
              26 - 31.63235294117647 = -5.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 31.88497212610535
       Euclidische afstand: 5.646677972587542
 _____
{0: 10.014719366571425, 1: 28.15891782927854, 2: 5.646677972587542}
_____
Afstand van bronindex 618 tot...
```

Centrumindex 0:

```
4 - 15.992481203007529 = -11.992481203007529
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 144.20437842727142
       Euclidische afstand: 12.008512748349457
           -----
       Centrumindex 1:
               4 - 54.156682027649765 = -50.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 2516.1089851132956
       Euclidische afstand: 50.160831184434095
       Centrumindex 2:
               4 - 31.63235294117647 = -27.63235294117647
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 763.9045799692426
       Euclidische afstand: 27.63882378049476
   _____
{0: 12.008512748349457, 1: 50.160831184434095, 2: 27.63882378049476}
Afstand van bronindex 619 tot...
       Centrumindex 0:
               26 - 15.992481203007529 = 10.007518796992471
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 100.29460399118075
       Euclidische afstand: 10.014719366571425
       Centrumindex 1:
               26 - 54.156682027649765 = -28.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 792.9246533160608
       Euclidische afstand: 28.15891782927854
       Centrumindex 2:
               26 - 31.63235294117647 = -5.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 31.88497212610535
       Euclidische afstand: 5.646677972587542
{0: 10.014719366571425, 1: 28.15891782927854, 2: 5.646677972587542}
_____
Afstand van bronindex 620 tot...
       Centrumindex 0:
               27 - 15.992481203007529 = 11.007518796992471
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 121.30964158516569
```

Euclidische afstand: 11.014065624698524

```
Centrumindex 1:
              27 - 54.156682027649765 = -27.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 737.6112892607613
       Euclidische afstand: 27.159000152081468
       Centrumindex 2:
              27 - 31.63235294117647 = -4.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 21.620266243752408
       Euclidische afstand: 4.649759804952553
{0: 11.014065624698524, 1: 27.159000152081468, 2: 4.649759804952553}
  _____
Afstand van bronindex 621 tot...
       Centrumindex 0:
              42 - 15.992481203007529 = 26.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 676.7758069986992
       Euclidische afstand: 26.01491508728597
 _____
       Centrumindex 1:
              42 - 54.156682027649765 = -12.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 148.2011510119135
       Euclidische afstand: 12.173789509101654
        _____
       Centrumindex 2:
              42 - 31.63235294117647 = 10.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 107.84575643983082
       Euclidische afstand: 10.38488114712108
{0: 26.01491508728597, 1: 12.173789509101654, 2: 10.38488114712108}
_____
Afstand van bronindex 622 tot...
       Centrumindex 0:
              20 - 15.992481203007529 = 4.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 16.444979931030506
       Euclidische afstand: 4.05524104475067
 _____
       Centrumindex 1:
              20 - 54.156682027649765 = -34.156682027649765
```

1 - 0.3548387096774193 = 0.6451612903225807

```
Totale euclidische som: 1167.0951602285033
      Euclidische afstand: 34.162774480836646
      Centrumindex 2:
              20 - 31.63235294117647 = -11.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 135.66928585159556
      Euclidische afstand: 11.64771590706073
     -----
{0: 4.05524104475067, 1: 34.162774480836646, 2: 11.64771590706073}
_____
Afstand van bronindex 623 tot...
      Centrumindex 0:
              21 - 15.992481203007529 = 5.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 25.21941602125605
      Euclidische afstand: 5.021893668852025
      Centrumindex 1:
              21 - 54.156682027649765 = -33.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1099.4914735925583
      Euclidische afstand: 33.15858069327694
 ._____
       Centrumindex 2:
              21 - 31.63235294117647 = -10.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 113.20850153787006
       Euclidische afstand: 10.639948380413792
   -----
{0: 5.021893668852025, 1: 33.15858069327694, 2: 10.639948380413792}
_____
Afstand van bronindex 624 tot...
      Centrumindex 0:
              21 - 15.992481203007529 = 5.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 25.21941602125605
      Euclidische afstand: 5.021893668852025
      Centrumindex 1:
              21 - 54.156682027649765 = -33.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1099.4914735925583
      Euclidische afstand: 33.15858069327694
```

Centrumindex 2:

```
21 - 31.63235294117647 = -10.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 113.20850153787006
      Euclidische afstand: 10.639948380413792
  _____
{0: 5.021893668852025, 1: 33.15858069327694, 2: 10.639948380413792}
  -----
Afstand van bronindex 625 tot...
      Centrumindex 0:
             61 - 15.992481203007529 = 45.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 2025.8209197806536
      Euclidische afstand: 45.009120406653736
       -----
      Centrumindex 1:
             61 - 54.156682027649765 = 6.843317972350235
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 46.95691138057727
      Euclidische afstand: 6.852511319259332
          -----
      Centrumindex 2:
             61 - 31.63235294117647 = 29.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 862.6202662437523
      Euclidische afstand: 29.37039778831319
 _____
{0: 45.009120406653736, 1: 6.852511319259332, 2: 29.37039778831319}
_____
Afstand van bronindex 626 tot...
      Centrumindex 0:
             57 - 15.992481203007529 = 41.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1681.760769404714
      Euclidische afstand: 41.00927662620634
      Centrumindex 1:
             57 - 54.156682027649765 = 2.843317972350235
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 8.210367601775387
      Euclidische afstand: 2.865373902612953
       .____
      Centrumindex 2:
             57 - 31.63235294117647 = 25.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 643.6790897731642
```

Euclidische afstand: 25.370831475794485

```
{0: 41.00927662620634, 1: 2.865373902612953, 2: 25.370831475794485}
_____
Afstand van bronindex 627 tot...
      Centrumindex 0:
              21 - 15.992481203007529 = 5.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 25.46001752501545
      Euclidische afstand: 5.0457920612145175
       Centrumindex 1:
              21 - 54.156682027649765 = -33.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1099.7817961732037
      Euclidische afstand: 33.162958193942885
  _____
      Centrumindex 2:
              21 - 31.63235294117647 = -10.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 113.4045799692426
      Euclidische afstand: 10.649158650768737
   _____
{0: 5.0457920612145175, 1: 33.162958193942885, 2: 10.649158650768737}
Afstand van bronindex 628 tot...
      Centrumindex 0:
              26 - 15.992481203007529 = 10.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 100.29460399118075
      Euclidische afstand: 10.014719366571425
      Centrumindex 1:
              26 - 54.156682027649765 = -28.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 792.9246533160608
      Euclidische afstand: 28.15891782927854
       Centrumindex 2:
              26 - 31.63235294117647 = -5.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 31.88497212610535
       Euclidische afstand: 5.646677972587542
    _____
{0: 10.014719366571425, 1: 28.15891782927854, 2: 5.646677972587542}
```

\_\_\_\_\_

```
Afstand van bronindex 629 tot...
       Centrumindex 0:
               45 - 15.992481203007529 = 29.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 841.5803182768947
       Euclidische afstand: 29.010003762097217
       Centrumindex 1:
               45 - 54.156682027649765 = -9.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 83.97073626536975
       Euclidische afstand: 9.16355478323613
       Centrumindex 2:
               45 - 31.63235294117647 = 13.367647058823529
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 178.85556036139945
       Euclidische afstand: 13.373689108148113
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
    _____
Afstand van bronindex 630 tot...
       Centrumindex 0:
               80 - 15.992481203007529 = 64.00751879699247
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 4097.347235570127
       Euclidische afstand: 64.01052441255365
        _____
       Centrumindex 1:
               80 - 54.156682027649765 = 25.843317972350235
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 668.2933169105313
       Euclidische afstand: 25.851369729871788
       Centrumindex 2:
               80 - 31.63235294117647 = 48.36764705882353
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 2339.786932910419
       Euclidische afstand: 48.37134412966441
{0: 64.01052441255365, 1: 25.851369729871788, 2: 48.37134412966441}
______
Afstand van bronindex 631 tot...
       Centrumindex 0:
               51 - 15.992481203007529 = 35.00751879699247
```

0 - 0.3796992481203007 = -0.3796992481203007

```
Totale euclidische som: 1225.6705438408044
       Euclidische afstand: 35.009577887212586
       Centrumindex 1:
              51 - 54.156682027649765 = -3.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 10.090551933572568
       Euclidische afstand: 3.1765629119494183
  -----
       Centrumindex 2:
              51 - 31.63235294117647 = 19.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 375.26732506728183
       Euclidische afstand: 19.371817804926874
  _____
{0: 35.009577887212586, 1: 3.1765629119494183, 2: 19.371817804926874}
_____
Afstand van bronindex 632 tot...
      Centrumindex 0:
              32 - 15.992481203007529 = 16.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 256.6254310588498
       Euclidische afstand: 16.01953279777066
 ._____
       Centrumindex 1:
              32 - 54.156682027649765 = -22.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 491.3347915649088
       Euclidische afstand: 22.166072984741994
 ._____
       Centrumindex 2:
              32 - 31.63235294117647 = 0.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 0.49281526336024584
       Euclidische afstand: 0.7020080222905191
{0: 16.01953279777066, 1: 22.166072984741994, 2: 0.7020080222905191}
Afstand van bronindex 633 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 841.5803182768947
       Euclidische afstand: 29.010003762097217
```

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Centrumindex 1:

```
45 - 54.156682027649765 = -9.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 83.97073626536975
      Euclidische afstand: 9.16355478323613
          -----
      Centrumindex 2:
             45 - 31.63235294117647 = 13.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 178.85556036139945
      Euclidische afstand: 13.373689108148113
 ______
{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}
______
Afstand van bronindex 634 tot...
      Centrumindex 0:
             9 - 15.992481203007529 = -6.992481203007529
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 49.03896489343674
      Euclidische afstand: 7.002782653591124
          ._____
      Centrumindex 1:
             9 - 54.156682027649765 = -45.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 2039.2518422561527
      Euclidische afstand: 45.158076157606104
      Centrumindex 2:
             9 - 31.63235294117647 = -22.63235294117647
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 512.3849721261054
      Euclidische afstand: 22.635922162043794
  -----
{0: 7.002782653591124, 1: 45.158076157606104, 2: 22.635922162043794}
   -----
Afstand van bronindex 635 tot...
      Centrumindex 0:
             28 - 15.992481203007529 = 12.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 144.56528068291004
      Euclidische afstand: 12.023530292011163
       _____
      Centrumindex 1:
             28 - 54.156682027649765 = -26.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 684.5882477861069
```

Euclidische afstand: 26.164637352466915

```
Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 13.551638792772014
       Euclidische afstand: 3.6812550567397544
{0: 12.023530292011163, 1: 26.164637352466915, 2: 3.6812550567397544}
Afstand van bronindex 636 tot...
       Centrumindex 0:
              32 - 15.992481203007529 = 16.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 256.38482955509045
       Euclidische afstand: 16.01202140752661
       Centrumindex 1:
              32 - 54.156682027649765 = -22.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 491.0444689842637
       Euclidische afstand: 22.15952321202475
 _____
       Centrumindex 2:
              32 - 31.63235294117647 = 0.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 0.2967368319876966
       Euclidische afstand: 0.5447355615229252
{0: 16.01202140752661, 1: 22.15952321202475, 2: 0.5447355615229252}
_____
Afstand van bronindex 637 tot...
       Centrumindex 0:
              31 - 15.992481203007529 = 15.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 225.36979196110548
       Euclidische afstand: 15.012321338191022
       Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 536.3578330395632
       Euclidische afstand: 23.159400532819564
 ._____
       Centrumindex 2:
              31 - 31.63235294117647 = -0.632352941176471
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 0.5614427143406386
      Euclidische afstand: 0.7492948113664198
{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}
-----
Afstand van bronindex 638 tot...
       Centrumindex 0:
              41 - 15.992481203007529 = 25.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 625.5201679009549
      Euclidische afstand: 25.01040119432223
 _____
       Centrumindex 1:
              41 - 54.156682027649765 = -13.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 173.22419248656786
      Euclidische afstand: 13.161466198207853
      Centrumindex 2:
              41 - 31.63235294117647 = 9.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 87.91438389081122
      Euclidische afstand: 9.376267055220389
  ._____
{0: 25.01040119432223, 1: 13.161466198207853, 2: 9.376267055220389}
_____
Afstand van bronindex 639 tot...
      Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 841.5803182768947
      Euclidische afstand: 29.010003762097217
      Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 83.97073626536975
      Euclidische afstand: 9.16355478323613
      Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 178.85556036139945
      Euclidische afstand: 13.373689108148113
  .....
```

{0: 29.010003762097217, 1: 9.16355478323613, 2: 13.373689108148113}

```
1
Afstand van bronindex 640 tot...
       Centrumindex 0:
               20 - 15.992481203007529 = 4.007518796992471
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 16.204378427271106
       Euclidische afstand: 4.025466237253904
       Centrumindex 1:
               20 - 54.156682027649765 = -34.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1166.804837647858
       Euclidische afstand: 34.158525109375816
       ______
       Centrumindex 2:
               20 - 31.63235294117647 = -11.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 135.473207420223
       Euclidische afstand: 11.639295830084524
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
Afstand van bronindex 641 tot...
       Centrumindex 0:
               24 - 15.992481203007529 = 8.007518796992471
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 64.50513030697027
       Euclidische afstand: 8.031508594714337
       Centrumindex 1:
               24 - 54.156682027649765 = -30.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 909.841704007305
       Euclidische afstand: 30.163582413355762
       Centrumindex 2:
               24 - 31.63235294117647 = -7.632352941176471
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 58.61046232218378
       Euclidische afstand: 7.655747012681635
  ______
{0: 8.031508594714337, 1: 30.163582413355762, 2: 7.655747012681635}
_____
Afstand van bronindex 642 tot...
```

Centrumindex 0:

```
2 - 15.992481203007529 = -13.992481203007529
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 195.93370173554214
       Euclidische afstand: 13.997632004576422
          -----
       Centrumindex 1:
              2 - 54.156682027649765 = -52.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 2720.4453906432495
       Euclidische afstand: 52.1578890547082
       _____
       Centrumindex 2:
              2 - 31.63235294117647 = -29.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 878.237913302576
       Euclidische afstand: 29.63507910066339
   _____
{0: 13.997632004576422, 1: 52.1578890547082, 2: 29.63507910066339}
Afstand van bronindex 643 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 841.8209197806541
       Euclidische afstand: 29.0141503370451
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 84.2610588460149
       Euclidische afstand: 9.179382269304122
       Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 179.05163879277202
       Euclidische afstand: 13.381017853391125
{0: 29.0141503370451, 1: 9.179382269304122, 2: 13.381017853391125}
_____
Afstand van bronindex 644 tot...
       Centrumindex 0:
              75 - 15.992481203007529 = 59.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 3482.2720476002023
```

Euclidische afstand: 59.01077907975968

```
Centrumindex 1:
              75 - 54.156682027649765 = 20.843317972350235
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 434.860137187029
       Euclidische afstand: 20.853300390754193
       Centrumindex 2:
              75 - 31.63235294117647 = 43.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 1881.1104623221836
       Euclidische afstand: 43.3717703388066
{0: 59.01077907975968, 1: 20.853300390754193, 2: 43.3717703388066}
  _____
Afstand van bronindex 645 tot...
       Centrumindex 0:
              48 - 15.992481203007529 = 32.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1024.866032562609
       Euclidische afstand: 32.01352889892973
 ______
       Centrumindex 1:
              48 - 54.156682027649765 = -6.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 38.32096668011632
       Euclidische afstand: 6.190393095766724
        ______
       Centrumindex 2:
              48 - 31.63235294117647 = 16.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 268.2575211457132
       Euclidische afstand: 16.37856895903037
{0: 32.01352889892973, 1: 6.190393095766724, 2: 16.37856895903037}
_____
Afstand van bronindex 646 tot...
       Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 9.189340833286163
       Euclidische afstand: 3.031392556777522
 ._____
       Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
```

```
Totale euclidische som: 1236.1182017031574
      Euclidische afstand: 35.15847268729342
      Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 159.73791330257595
      Euclidische afstand: 12.638746508359757
     ._____
{0: 3.031392556777522, 1: 35.15847268729342, 2: 12.638746508359757}
_____
Afstand van bronindex 647 tot...
      Centrumindex 0:
              56 - 15.992481203007529 = 40.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1600.9863333144885
      Euclidische afstand: 40.01232726691224
      Centrumindex 1:
              56 - 54.156682027649765 = 1.8433179723502349
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 3.8140542377200783
      Euclidische afstand: 1.95296037791863
 ._____
       Centrumindex 2:
              56 - 31.63235294117647 = 24.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 594.1398740868897
       Euclidische afstand: 24.37498459664928
    -----
{0: 40.01232726691224, 1: 1.95296037791863, 2: 24.37498459664928}
_____
Afstand van bronindex 648 tot...
      Centrumindex 0:
              23 - 15.992481203007529 = 7.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 49.24949120922594
      Euclidische afstand: 7.017798173873764
      Centrumindex 1:
              23 - 54.156682027649765 = -31.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 970.8647454819594
      Euclidische afstand: 31.158702564162702
```

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Centrumindex 2:

```
23 - 31.63235294117647 = -8.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 74.67908977316418
      Euclidische afstand: 8.641706415585071
  _____
{0: 7.017798173873764, 1: 31.158702564162702, 2: 8.641706415585071}
   _____
Afstand van bronindex 649 tot...
      Centrumindex 0:
              23 - 15.992481203007529 = 7.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 49.49009271298533
      Euclidische afstand: 7.034919524272138
       -----
      Centrumindex 1:
              23 - 54.156682027649765 = -31.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 971.1550680626045
      Euclidische afstand: 31.16336098790701
          -----
       Centrumindex 2:
              23 - 31.63235294117647 = -8.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 74.87516820453672
      Euclidische afstand: 8.653043869329261
{0: 7.034919524272138, 1: 31.16336098790701, 2: 8.653043869329261}
_____
Afstand van bronindex 650 tot...
      Centrumindex 0:
              23 - 15.992481203007529 = 7.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 49.24949120922594
      Euclidische afstand: 7.017798173873764
      Centrumindex 1:
              23 - 54.156682027649765 = -31.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 970.8647454819594
      Euclidische afstand: 31.158702564162702
       .____
      Centrumindex 2:
              23 - 31.63235294117647 = -8.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 74.67908977316418
```

Euclidische afstand: 8.641706415585071

```
{0: 7.017798173873764, 1: 31.158702564162702, 2: 8.641706415585071}
  _____
Afstand van bronindex 651 tot...
      Centrumindex 0:
             18 - 15.992481203007529 = 2.0075187969924713
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 4.414904743060619
      Euclidische afstand: 2.1011674714454864
          _____
      Centrumindex 1:
             18 - 54.156682027649765 = -36.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1307.7218883391024
      Euclidische afstand: 36.16243753315175
  _____
      Centrumindex 2:
             18 - 31.63235294117647 = -13.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 186.19869761630144
      Euclidische afstand: 13.645464360596215
   _____
{0: 2.1011674714454864, 1: 36.16243753315175, 2: 13.645464360596215}
Afstand van bronindex 652 tot...
      Centrumindex 0:
             21 - 15.992481203007529 = 5.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 25.21941602125605
      Euclidische afstand: 5.021893668852025
      Centrumindex 1:
             21 - 54.156682027649765 = -33.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1099.4914735925583
      Euclidische afstand: 33.15858069327694
      Centrumindex 2:
             21 - 31.63235294117647 = -10.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 113.20850153787006
      Euclidische afstand: 10.639948380413792
    _____
{0: 5.021893668852025, 1: 33.15858069327694, 2: 10.639948380413792}
```

```
Afstand van bronindex 653 tot...
       Centrumindex 0:
               23 - 15.992481203007529 = 7.007518796992471
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 49.49009271298533
       Euclidische afstand: 7.034919524272138
       Centrumindex 1:
               23 - 54.156682027649765 = -31.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 971.1550680626045
       Euclidische afstand: 31.16336098790701
       Centrumindex 2:
               23 - 31.63235294117647 = -8.632352941176471
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 74.87516820453672
       Euclidische afstand: 8.653043869329261
{0: 7.034919524272138, 1: 31.16336098790701, 2: 8.653043869329261}
    -----
Afstand van bronindex 654 tot...
       Centrumindex 0:
               18 - 15.992481203007529 = 2.0075187969924713
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 4.174303239301221
       Euclidische afstand: 2.0431111666527646
        ._____
       Centrumindex 1:
               18 - 54.156682027649765 = -36.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1307.431565758457
       Euclidische afstand: 36.15842316471305
       Centrumindex 2:
               18 - 31.63235294117647 = -13.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 186.00261918492888
       Euclidische afstand: 13.638277720626196
{0: 2.0431111666527646, 1: 36.15842316471305, 2: 13.638277720626196}
______
Afstand van bronindex 655 tot...
       Centrumindex 0:
               24 - 15.992481203007529 = 8.007518796992471
```

0 - 0.3796992481203007 = -0.3796992481203007

```
Totale euclidische som: 64.26452880321087
      Euclidische afstand: 8.016516001556466
      Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 909.5513814266599
      Euclidische afstand: 30.158769560886597
   _____
      Centrumindex 2:
              24 - 31.63235294117647 = -7.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 58.41438389081123
      Euclidische afstand: 7.642930320944397
  _____
{0: 8.016516001556466, 1: 30.158769560886597, 2: 7.642930320944397}
_____
Afstand van bronindex 656 tot...
      Centrumindex 0:
              23 - 15.992481203007529 = 7.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 49.24949120922594
      Euclidische afstand: 7.017798173873764
 ._____
       Centrumindex 1:
              23 - 54.156682027649765 = -31.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 970.8647454819594
      Euclidische afstand: 31.158702564162702
 ._____
       Centrumindex 2:
              23 - 31.63235294117647 = -8.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 74.67908977316418
      Euclidische afstand: 8.641706415585071
{0: 7.017798173873764, 1: 31.158702564162702, 2: 8.641706415585071}
Afstand van bronindex 657 tot...
      Centrumindex 0:
              32 - 15.992481203007529 = 16.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 256.38482955509045
      Euclidische afstand: 16.01202140752661
```

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Centrumindex 1:

```
32 - 54.156682027649765 = -22.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 491.0444689842637
      Euclidische afstand: 22.15952321202475
         -----
      Centrumindex 2:
             32 - 31.63235294117647 = 0.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 0.2967368319876966
      Euclidische afstand: 0.5447355615229252
  _____
{0: 16.01202140752661, 1: 22.15952321202475, 2: 0.5447355615229252}
______
Afstand van bronindex 658 tot...
      Centrumindex 0:
             23 - 15.992481203007529 = 7.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 49.24949120922594
      Euclidische afstand: 7.017798173873764
          ._____
      Centrumindex 1:
             23 - 54.156682027649765 = -31.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 970.8647454819594
      Euclidische afstand: 31.158702564162702
      Centrumindex 2:
             23 - 31.63235294117647 = -8.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 74.67908977316418
      Euclidische afstand: 8.641706415585071
  ._____
{0: 7.017798173873764, 1: 31.158702564162702, 2: 8.641706415585071}
   _____
Afstand van bronindex 659 tot...
      Centrumindex 0:
             58 - 15.992481203007529 = 42.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1764.775806998699
      Euclidische afstand: 42.009234782351115
       _____
      Centrumindex 1:
             58 - 54.156682027649765 = 3.843317972350235
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 14.897003546475856
```

Euclidische afstand: 3.8596636571696057

```
Centrumindex 2:
              58 - 31.63235294117647 = 26.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 695.4143838908112
       Euclidische afstand: 26.370710720244368
{0: 42.009234782351115, 1: 3.8596636571696057, 2: 26.370710720244368}
Afstand van bronindex 660 tot...
       Centrumindex 0:
              50 - 15.992481203007529 = 34.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1156.896107750579
       Euclidische afstand: 34.01317550230468
       Centrumindex 1:
              50 - 54.156682027649765 = -4.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 17.69423856951726
       Euclidische afstand: 4.206452016785317
 _____
       Centrumindex 2:
              50 - 31.63235294117647 = 18.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 337.7281093810073
       Euclidische afstand: 18.377380373192675
{0: 34.01317550230468, 1: 4.206452016785317, 2: 18.377380373192675}
_____
Afstand van bronindex 661 tot...
       Centrumindex 0:
              40 - 15.992481203007529 = 24.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 576.5051303069699
       Euclidische afstand: 24.01052124188415
       Centrumindex 1:
              40 - 54.156682027649765 = -14.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 200.5375565418674
       Euclidische afstand: 14.161128364006428
 ._____
       Centrumindex 2:
              40 - 31.63235294117647 = 8.367647058823529
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 70.17908977316416
      Euclidische afstand: 8.377296089620097
{0: 24.01052124188415, 1: 14.161128364006428, 2: 8.377296089620097}
_____
Afstand van bronindex 662 tot...
      Centrumindex 0:
              47 - 15.992481203007529 = 31.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 961.6103934648645
      Euclidische afstand: 31.00984349307272
 _____
      Centrumindex 1:
              47 - 54.156682027649765 = -7.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 51.34400815477069
      Euclidische afstand: 7.165473337803351
      Centrumindex 2:
             47 - 31.63235294117647 = 15.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 236.32614859669357
      Euclidische afstand: 15.372903063400015
  ._____
{0: 31.00984349307272, 1: 7.165473337803351, 2: 15.372903063400015}
_____
Afstand van bronindex 663 tot...
      Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 400.4449799310302
      Euclidische afstand: 20.011121406133896
      Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 329.79101276306557
      Euclidische afstand: 18.160149029208586
      Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 19.23791330257593
      Euclidische afstand: 4.386104570410506
  .-----
```

{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}

```
_____
Afstand van bronindex 664 tot...
      Centrumindex 0:
              20 - 15.992481203007529 = 4.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 16.444979931030506
      Euclidische afstand: 4.05524104475067
   _____
      Centrumindex 1:
              20 - 54.156682027649765 = -34.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1167.0951602285033
      Euclidische afstand: 34.162774480836646
       ______
      Centrumindex 2:
              20 - 31.63235294117647 = -11.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 135.66928585159556
      Euclidische afstand: 11.64771590706073
{0: 4.05524104475067, 1: 34.162774480836646, 2: 11.64771590706073}
Afstand van bronindex 665 tot...
       Centrumindex 0:
              32 - 15.992481203007529 = 16.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 256.38482955509045
      Euclidische afstand: 16.01202140752661
       Centrumindex 1:
              32 - 54.156682027649765 = -22.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 491.0444689842637
      Euclidische afstand: 22.15952321202475
      Centrumindex 2:
              32 - 31.63235294117647 = 0.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 0.2967368319876966
      Euclidische afstand: 0.5447355615229252
 _____
{0: 16.01202140752661, 1: 22.15952321202475, 2: 0.5447355615229252}
_____
Afstand van bronindex 666 tot...
```

Centrumindex 0:

```
25 - 15.992481203007529 = 9.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 81.27956639719581
       Euclidische afstand: 9.01551808811872
          -----
       Centrumindex 1:
              25 - 54.156682027649765 = -29.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 850.2380173713603
       Euclidische afstand: 29.158841152750917
          _____
       Centrumindex 2:
              25 - 31.63235294117647 = -6.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 44.14967800845829
       Euclidische afstand: 6.644522406347825
   _____
{0: 9.01551808811872, 1: 29.158841152750917, 2: 6.644522406347825}
2
Afstand van bronindex 667 tot...
       Centrumindex 0:
              23 - 15.992481203007529 = 7.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 49.24949120922594
       Euclidische afstand: 7.017798173873764
 _____
       Centrumindex 1:
              23 - 54.156682027649765 = -31.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 970.8647454819594
       Euclidische afstand: 31.158702564162702
       Centrumindex 2:
              23 - 31.63235294117647 = -8.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 74.67908977316418
       Euclidische afstand: 8.641706415585071
{0: 7.017798173873764, 1: 31.158702564162702, 2: 8.641706415585071}
_____
Afstand van bronindex 668 tot...
       Centrumindex 0:
              43 - 15.992481203007529 = 27.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 729.5502430889247
```

Euclidische afstand: 27.010187764784693

```
Centrumindex 1:
              43 - 54.156682027649765 = -11.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 124.59746437596881
       Euclidische afstand: 11.162323430897745
       Centrumindex 2:
              43 - 31.63235294117647 = 11.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 129.38497212610534
       Euclidische afstand: 11.374751519312646
{0: 27.010187764784693, 1: 11.162323430897745, 2: 11.374751519312646}
  -----
Afstand van bronindex 669 tot...
       Centrumindex 0:
              23 - 15.992481203007529 = 7.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 49.49009271298533
       Euclidische afstand: 7.034919524272138
 ______
       Centrumindex 1:
              23 - 54.156682027649765 = -31.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 971.1550680626045
       Euclidische afstand: 31.16336098790701
        ______
       Centrumindex 2:
              23 - 31.63235294117647 = -8.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 74.87516820453672
       Euclidische afstand: 8.653043869329261
{0: 7.034919524272138, 1: 31.16336098790701, 2: 8.653043869329261}
_____
Afstand van bronindex 670 tot...
       Centrumindex 0:
              40 - 15.992481203007529 = 24.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 576.7457318107294
       Euclidische afstand: 24.015531054105995
 ._____
       Centrumindex 1:
              40 - 54.156682027649765 = -14.156682027649765
```

1 - 0.3548387096774193 = 0.6451612903225807

```
Totale euclidische som: 200.82787912251257
      Euclidische afstand: 14.171375343364263
      Centrumindex 2:
              40 - 31.63235294117647 = 8.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 70.3751682045367
      Euclidische afstand: 8.38899089310131
     _____
{0: 24.015531054105995, 1: 14.171375343364263, 2: 8.38899089310131}
_____
Afstand van bronindex 671 tot...
      Centrumindex 0:
              31 - 15.992481203007529 = 15.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 225.36979196110548
      Euclidische afstand: 15.012321338191022
      Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 536.3578330395632
      Euclidische afstand: 23.159400532819564
 ._____
       Centrumindex 2:
              31 - 31.63235294117647 = -0.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 0.5614427143406386
       Euclidische afstand: 0.7492948113664198
   _____
{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}
_____
Afstand van bronindex 672 tot...
      Centrumindex 0:
              70 - 15.992481203007529 = 54.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 2916.956258126518
      Euclidische afstand: 54.0088535161275
      Centrumindex 1:
              70 - 54.156682027649765 = 15.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 251.13663488288148
      Euclidische afstand: 15.84729108973775
```

Centrumindex 2:

```
70 - 31.63235294117647 = 38.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 1472.2379133025759
      Euclidische afstand: 38.36975258328591
  _____
{0: 54.0088535161275, 1: 15.84729108973775, 2: 38.36975258328591}
-------
Afstand van bronindex 673 tot...
      Centrumindex 0:
              31 - 15.992481203007529 = 15.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 225.61039346486487
      Euclidische afstand: 15.020332668248892
       -----
      Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 536.6481556202083
      Euclidische afstand: 23.165667605752446
          -----
       Centrumindex 2:
              31 - 31.63235294117647 = -0.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 0.7575211457131878
      Euclidische afstand: 0.8703569070865055
{0: 15.020332668248892, 1: 23.165667605752446, 2: 0.8703569070865055}
_____
Afstand van bronindex 674 tot...
      Centrumindex 0:
              23 - 15.992481203007529 = 7.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 49.24949120922594
      Euclidische afstand: 7.017798173873764
      Centrumindex 1:
              23 - 54.156682027649765 = -31.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 970.8647454819594
      Euclidische afstand: 31.158702564162702
       ._____
      Centrumindex 2:
              23 - 31.63235294117647 = -8.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 74.67908977316418
```

Euclidische afstand: 8.641706415585071

```
{0: 7.017798173873764, 1: 31.158702564162702, 2: 8.641706415585071}
  _____
Afstand van bronindex 675 tot...
      Centrumindex 0:
             18 - 15.992481203007529 = 2.0075187969924713
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 4.174303239301221
      Euclidische afstand: 2.0431111666527646
          ._____
      Centrumindex 1:
             18 - 54.156682027649765 = -36.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1307.431565758457
      Euclidische afstand: 36.15842316471305
  _____
      Centrumindex 2:
             18 - 31.63235294117647 = -13.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 186.00261918492888
      Euclidische afstand: 13.638277720626196
   _____
{0: 2.0431111666527646, 1: 36.15842316471305, 2: 13.638277720626196}
Afstand van bronindex 676 tot...
      Centrumindex 0:
             24 - 15.992481203007529 = 8.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 64.26452880321087
      Euclidische afstand: 8.016516001556466
      Centrumindex 1:
             24 - 54.156682027649765 = -30.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 909.5513814266599
      Euclidische afstand: 30.158769560886597
      Centrumindex 2:
             24 - 31.63235294117647 = -7.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 58.41438389081123
      Euclidische afstand: 7.642930320944397
    _____
{0: 8.016516001556466, 1: 30.158769560886597, 2: 7.642930320944397}
```

\_\_\_\_\_

```
Afstand van bronindex 677 tot...
       Centrumindex 0:
               18 - 15.992481203007529 = 2.0075187969924713
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 4.414904743060619
       Euclidische afstand: 2.1011674714454864
       Centrumindex 1:
               18 - 54.156682027649765 = -36.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1307.7218883391024
       Euclidische afstand: 36.16243753315175
       Centrumindex 2:
               18 - 31.63235294117647 = -13.632352941176471
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 186.19869761630144
       Euclidische afstand: 13.645464360596215
{0: 2.1011674714454864, 1: 36.16243753315175, 2: 13.645464360596215}
    -----
Afstand van bronindex 678 tot...
       Centrumindex 0:
               43 - 15.992481203007529 = 27.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 729.5502430889247
       Euclidische afstand: 27.010187764784693
        _____
       Centrumindex 1:
               43 - 54.156682027649765 = -11.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 124.59746437596881
       Euclidische afstand: 11.162323430897745
       Centrumindex 2:
               43 - 31.63235294117647 = 11.367647058823529
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 129.38497212610534
       Euclidische afstand: 11.374751519312646
{0: 27.010187764784693, 1: 11.162323430897745, 2: 11.374751519312646}
______
Afstand van bronindex 679 tot...
       Centrumindex 0:
               36 - 15.992481203007529 = 20.00751879699247
```

1 - 0.3796992481203007 = 0.6203007518796992

```
Totale euclidische som: 400.6855814347896
       Euclidische afstand: 20.017132198064477
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 330.0813353437107
       Euclidische afstand: 18.168140668315807
  -----
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 19.433991733948478
       Euclidische afstand: 4.408400133149041
  -----
{0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
_____
Afstand van bronindex 680 tot...
      Centrumindex 0:
              27 - 15.992481203007529 = 11.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 121.30964158516569
       Euclidische afstand: 11.014065624698524
 ._____
       Centrumindex 1:
              27 - 54.156682027649765 = -27.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 737.6112892607613
       Euclidische afstand: 27.159000152081468
 ._____
       Centrumindex 2:
              27 - 31.63235294117647 = -4.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 21.620266243752408
       Euclidische afstand: 4.649759804952553
{0: 11.014065624698524, 1: 27.159000152081468, 2: 4.649759804952553}
Afstand van bronindex 681 tot...
       Centrumindex 0:
              27 - 15.992481203007529 = 11.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 121.5502430889251
       Euclidische afstand: 11.02498267975624
```

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Centrumindex 1:

```
27 - 54.156682027649765 = -27.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 737.9016118414064
      Euclidische afstand: 27.16434449496999
          ._____
      Centrumindex 2:
             27 - 31.63235294117647 = -4.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 21.816344675124956
      Euclidische afstand: 4.67079700641389
  _____
{0: 11.02498267975624, 1: 27.16434449496999, 2: 4.67079700641389}
______
Afstand van bronindex 682 tot...
      Centrumindex 0:
             20 - 15.992481203007529 = 4.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 16.204378427271106
      Euclidische afstand: 4.025466237253904
          ._____
      Centrumindex 1:
             20 - 54.156682027649765 = -34.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1166.804837647858
      Euclidische afstand: 34.158525109375816
      Centrumindex 2:
             20 - 31.63235294117647 = -11.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 135.473207420223
      Euclidische afstand: 11.639295830084524
  -----
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
  _____
Afstand van bronindex 683 tot...
      Centrumindex 0:
             14 - 15.992481203007529 = -1.9924812030075287
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 4.114152863361451
      Euclidische afstand: 2.0283374628896076
       ._____
      Centrumindex 1:
             14 - 54.156682027649765 = -40.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1612.6850219796552
```

Euclidische afstand: 40.15824973750294

```
Centrumindex 2:
              14 - 31.63235294117647 = -17.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 311.06144271434067
       Euclidische afstand: 17.636934050858745
{0: 2.0283374628896076, 1: 40.15824973750294, 2: 17.636934050858745}
Afstand van bronindex 684 tot...
       Centrumindex 0:
              60 - 15.992481203007529 = 44.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1936.8058821866687
       Euclidische afstand: 44.00915679931472
       Centrumindex 1:
              60 - 54.156682027649765 = 5.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 34.2702754358768
       Euclidische afstand: 5.854081946460674
 _____
       Centrumindex 2:
              60 - 31.63235294117647 = 28.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 804.8849721261053
       Euclidische afstand: 28.37049474588177
{0: 44.00915679931472, 1: 5.854081946460674, 2: 28.37049474588177}
Afstand van bronindex 685 tot...
       Centrumindex 0:
              25 - 15.992481203007529 = 9.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 81.27956639719581
       Euclidische afstand: 9.01551808811872
       Centrumindex 1:
              25 - 54.156682027649765 = -29.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 850.2380173713603
       Euclidische afstand: 29.158841152750917
 ._____
       Centrumindex 2:
              25 - 31.63235294117647 = -6.632352941176471
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 44.14967800845829
      Euclidische afstand: 6.644522406347825
{0: 9.01551808811872, 1: 29.158841152750917, 2: 6.644522406347825}
-----
Afstand van bronindex 686 tot...
      Centrumindex 0:
              14 - 15.992481203007529 = -1.9924812030075287
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 4.114152863361451
      Euclidische afstand: 2.0283374628896076
 _____
      Centrumindex 1:
              14 - 54.156682027649765 = -40.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1612.6850219796552
      Euclidische afstand: 40.15824973750294
      Centrumindex 2:
              14 - 31.63235294117647 = -17.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 311.06144271434067
      Euclidische afstand: 17.636934050858745
   _____
{0: 2.0283374628896076, 1: 40.15824973750294, 2: 17.636934050858745}
_____
Afstand van bronindex 687 tot...
      Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 9.189340833286163
      Euclidische afstand: 3.031392556777522
      Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1236.1182017031574
      Euclidische afstand: 35.15847268729342
      Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 159.73791330257595
      Euclidische afstand: 12.638746508359757
  ._____
```

{0: 3.031392556777522, 1: 35.15847268729342, 2: 12.638746508359757}

```
Afstand van bronindex 688 tot...
       Centrumindex 0:
              18 - 15.992481203007529 = 2.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 4.174303239301221
       Euclidische afstand: 2.0431111666527646
   -----
       Centrumindex 1:
              18 - 54.156682027649765 = -36.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1307.431565758457
       Euclidische afstand: 36.15842316471305
       ______
       Centrumindex 2:
              18 - 31.63235294117647 = -13.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 186.00261918492888
       Euclidische afstand: 13.638277720626196
{0: 2.0431111666527646, 1: 36.15842316471305, 2: 13.638277720626196}
Afstand van bronindex 689 tot...
       Centrumindex 0:
              15 - 15.992481203007529 = -0.9924812030075287
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1.3697919611057916
       Euclidische afstand: 1.1703811178867298
 _____
       Centrumindex 1:
              15 - 54.156682027649765 = -39.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1533.6619805050009
       Euclidische afstand: 39.16199663583307
       Centrumindex 2:
              15 - 31.63235294117647 = -16.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 276.9928152633603
       Euclidische afstand: 16.643101131200286
 _____
```

{0: 1.1703811178867298, 1: 39.16199663583307, 2: 16.643101131200286}

\_\_\_\_\_

Afstand van bronindex 690 tot...

Centrumindex 0:

```
31 - 15.992481203007529 = 15.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 225.61039346486487
       Euclidische afstand: 15.020332668248892
          -----
       Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 536.6481556202083
       Euclidische afstand: 23.165667605752446
 _____
       Centrumindex 2:
              31 - 31.63235294117647 = -0.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 0.7575211457131878
       Euclidische afstand: 0.8703569070865055
   _____
{0: 15.020332668248892, 1: 23.165667605752446, 2: 0.8703569070865055}
2
Afstand van bronindex 691 tot...
       Centrumindex 0:
              4 - 15.992481203007529 = -11.992481203007529
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 144.20437842727142
       Euclidische afstand: 12.008512748349457
       Centrumindex 1:
              4 - 54.156682027649765 = -50.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 2516.1089851132956
       Euclidische afstand: 50.160831184434095
       Centrumindex 2:
              4 - 31.63235294117647 = -27.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 763.9045799692426
       Euclidische afstand: 27.63882378049476
{0: 12.008512748349457, 1: 50.160831184434095, 2: 27.63882378049476}
_____
Afstand van bronindex 692 tot...
       Centrumindex 0:
              27 - 15.992481203007529 = 11.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 121.5502430889251
```

Euclidische afstand: 11.02498267975624

```
Centrumindex 1:
              27 - 54.156682027649765 = -27.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 737.9016118414064
       Euclidische afstand: 27.16434449496999
       Centrumindex 2:
              27 - 31.63235294117647 = -4.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 21.816344675124956
       Euclidische afstand: 4.67079700641389
{0: 11.02498267975624, 1: 27.16434449496999, 2: 4.67079700641389}
   -----
Afstand van bronindex 693 tot...
       Centrumindex 0:
              25 - 15.992481203007529 = 9.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 81.27956639719581
       Euclidische afstand: 9.01551808811872
 _____
       Centrumindex 1:
              25 - 54.156682027649765 = -29.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 850.2380173713603
       Euclidische afstand: 29.158841152750917
         _____
       Centrumindex 2:
              25 - 31.63235294117647 = -6.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 44.14967800845829
       Euclidische afstand: 6.644522406347825
{0: 9.01551808811872, 1: 29.158841152750917, 2: 6.644522406347825}
______
Afstand van bronindex 694 tot...
       Centrumindex 0:
              60 - 15.992481203007529 = 44.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1936.8058821866687
       Euclidische afstand: 44.00915679931472
 _____
       Centrumindex 1:
              60 - 54.156682027649765 = 5.843317972350235
```

0 - 0.3548387096774193 = -0.3548387096774193

```
Totale euclidische som: 34.2702754358768
       Euclidische afstand: 5.854081946460674
      Centrumindex 2:
              60 - 31.63235294117647 = 28.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 804.8849721261053
      Euclidische afstand: 28.37049474588177
     _____
{0: 44.00915679931472, 1: 5.854081946460674, 2: 28.37049474588177}
_____
Afstand van bronindex 695 tot...
      Centrumindex 0:
              52 - 15.992481203007529 = 36.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1296.6855814347891
      Euclidische afstand: 36.00952070542996
      Centrumindex 1:
              52 - 54.156682027649765 = -2.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 4.777187878273038
      Euclidische afstand: 2.1856778990219574
 ._____
       Centrumindex 2:
              52 - 31.63235294117647 = 20.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 415.0026191849289
       Euclidische afstand: 20.37161307272767
   _____
{0: 36.00952070542996, 1: 2.1856778990219574, 2: 20.37161307272767}
1
_____
Afstand van bronindex 696 tot...
      Centrumindex 0:
              44 - 15.992481203007529 = 28.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 784.5652806829097
      Euclidische afstand: 28.010092479013878
      Centrumindex 1:
              44 - 54.156682027649765 = -10.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 103.28410032066928
      Euclidische afstand: 10.1628785450122
```

Centrumindex 2:

```
44 - 31.63235294117647 = 12.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 153.12026624375238
      Euclidische afstand: 12.37417739664954
  _____
{0: 28.010092479013878, 1: 10.1628785450122, 2: 12.37417739664954}
._____
Afstand van bronindex 697 tot...
      Centrumindex 0:
             27 - 15.992481203007529 = 11.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 121.5502430889251
      Euclidische afstand: 11.02498267975624
       ._____
      Centrumindex 1:
             27 - 54.156682027649765 = -27.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 737.9016118414064
      Euclidische afstand: 27.16434449496999
          -----
      Centrumindex 2:
             27 - 31.63235294117647 = -4.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 21.816344675124956
      Euclidische afstand: 4.67079700641389
 _____
{0: 11.02498267975624, 1: 27.16434449496999, 2: 4.67079700641389}
_____
Afstand van bronindex 698 tot...
      Centrumindex 0:
             49 - 15.992481203007529 = 33.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1089.6404686528344
      Euclidische afstand: 33.009702644114114
      Centrumindex 1:
             49 - 54.156682027649765 = -5.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 26.71728004417163
      Euclidische afstand: 5.1688760910058225
       .____
      Centrumindex 2:
             49 - 31.63235294117647 = 17.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 301.7967368319877
```

Euclidische afstand: 17.37229797211606

```
{0: 33.009702644114114, 1: 5.1688760910058225, 2: 17.37229797211606}
_____
Afstand van bronindex 699 tot...
      Centrumindex 0:
             42 - 15.992481203007529 = 26.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 676.5352054949398
      Euclidische afstand: 26.010290376982333
          _____
      Centrumindex 1:
             42 - 54.156682027649765 = -12.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 147.91082843126833
      Euclidische afstand: 12.161859579491466
 ______
      Centrumindex 2:
             42 - 31.63235294117647 = 10.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 107.64967800845828
      Euclidische afstand: 10.375436280391215
  ._____
{0: 26.010290376982333, 1: 12.161859579491466, 2: 10.375436280391215}
Afstand van bronindex 700 tot...
      Centrumindex 0:
             18 - 15.992481203007529 = 2.0075187969924713
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 4.414904743060619
      Euclidische afstand: 2.1011674714454864
      Centrumindex 1:
             18 - 54.156682027649765 = -36.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1307.7218883391024
      Euclidische afstand: 36.16243753315175
      Centrumindex 2:
             18 - 31.63235294117647 = -13.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 186.19869761630144
      Euclidische afstand: 13.645464360596215
    _____
{0: 2.1011674714454864, 1: 36.16243753315175, 2: 13.645464360596215}
```

\_\_\_\_\_

```
Afstand van bronindex 701 tot...
       Centrumindex 0:
               35 - 15.992481203007529 = 19.00751879699247
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 361.6705438408046
       Euclidische afstand: 19.017637704005317
       Centrumindex 1:
               35 - 54.156682027649765 = -19.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 367.3946993990102
       Euclidische afstand: 19.16754286284526
       Centrumindex 2:
               35 - 31.63235294117647 = 3.367647058823529
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 11.69869761630142
       Euclidische afstand: 3.420335892321311
{0: 19.017637704005317, 1: 19.16754286284526, 2: 3.420335892321311}
    _____
Afstand van bronindex 702 tot...
       Centrumindex 0:
               18 - 15.992481203007529 = 2.0075187969924713
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 4.174303239301221
       Euclidische afstand: 2.0431111666527646
        ._____
       Centrumindex 1:
               18 - 54.156682027649765 = -36.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1307.431565758457
       Euclidische afstand: 36.15842316471305
       Centrumindex 2:
               18 - 31.63235294117647 = -13.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 186.00261918492888
       Euclidische afstand: 13.638277720626196
{0: 2.0431111666527646, 1: 36.15842316471305, 2: 13.638277720626196}
______
Afstand van bronindex 703 tot...
       Centrumindex 0:
               25 - 15.992481203007529 = 9.007518796992471
```

0 - 0.3796992481203007 = -0.3796992481203007

```
Totale euclidische som: 81.27956639719581
      Euclidische afstand: 9.01551808811872
      Centrumindex 1:
              25 - 54.156682027649765 = -29.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 850.2380173713603
      Euclidische afstand: 29.158841152750917
   _____
      Centrumindex 2:
              25 - 31.63235294117647 = -6.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 44.14967800845829
      Euclidische afstand: 6.644522406347825
  _____
{0: 9.01551808811872, 1: 29.158841152750917, 2: 6.644522406347825}
_____
Afstand van bronindex 704 tot...
      Centrumindex 0:
              26 - 15.992481203007529 = 10.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 100.29460399118075
      Euclidische afstand: 10.014719366571425
 ._____
       Centrumindex 1:
              26 - 54.156682027649765 = -28.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 792.9246533160608
      Euclidische afstand: 28.15891782927854
 ._____
       Centrumindex 2:
              26 - 31.63235294117647 = -5.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 31.88497212610535
      Euclidische afstand: 5.646677972587542
{0: 10.014719366571425, 1: 28.15891782927854, 2: 5.646677972587542}
Afstand van bronindex 705 tot...
      Centrumindex 0:
              39 - 15.992481203007529 = 23.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 529.490092712985
      Euclidische afstand: 23.01065172290835
```

Centrumindex 1:

```
39 - 54.156682027649765 = -15.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 229.85092059716692
      Euclidische afstand: 15.160835089043312
         -----
      Centrumindex 2:
             39 - 31.63235294117647 = 7.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 54.4437956555171
      Euclidische afstand: 7.378603909651005
 _____
{0: 23.01065172290835, 1: 15.160835089043312, 2: 7.378603909651005}
______
Afstand van bronindex 706 tot...
      Centrumindex 0:
             45 - 15.992481203007529 = 29.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 841.8209197806541
      Euclidische afstand: 29.0141503370451
         -----
      Centrumindex 1:
             45 - 54.156682027649765 = -9.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 84.2610588460149
      Euclidische afstand: 9.179382269304122
_____
      Centrumindex 2:
             45 - 31.63235294117647 = 13.367647058823529
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 179.05163879277202
      Euclidische afstand: 13.381017853391125
 -----
{0: 29.0141503370451, 1: 9.179382269304122, 2: 13.381017853391125}
  -----
Afstand van bronindex 707 tot...
      Centrumindex 0:
             42 - 15.992481203007529 = 26.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 676.7758069986992
      Euclidische afstand: 26.01491508728597
       .____
      Centrumindex 1:
             42 - 54.156682027649765 = -12.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 148.2011510119135
```

Euclidische afstand: 12.173789509101654

```
Centrumindex 2:
              42 - 31.63235294117647 = 10.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 107.84575643983082
       Euclidische afstand: 10.38488114712108
{0: 26.01491508728597, 1: 12.173789509101654, 2: 10.38488114712108}
Afstand van bronindex 708 tot...
       Centrumindex 0:
              22 - 15.992481203007529 = 6.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 36.47505511900039
       Euclidische afstand: 6.039458180913283
       Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1034.4684321179043
       Euclidische afstand: 32.16315332982611
 _____
       Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 93.13987408688966
       Euclidische afstand: 9.650900169771194
{0: 6.039458180913283, 1: 32.16315332982611, 2: 9.650900169771194}
_____
Afstand van bronindex 709 tot...
       Centrumindex 0:
              27 - 15.992481203007529 = 11.007518796992471
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 121.5502430889251
       Euclidische afstand: 11.02498267975624
       Centrumindex 1:
              27 - 54.156682027649765 = -27.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 737.9016118414064
       Euclidische afstand: 27.16434449496999
 _____
       Centrumindex 2:
              27 - 31.63235294117647 = -4.632352941176471
```

1 - 0.4019607843137254 = 0.5980392156862746

```
Totale euclidische som: 21.816344675124956
       Euclidische afstand: 4.67079700641389
{0: 11.02498267975624, 1: 27.16434449496999, 2: 4.67079700641389}
-----
Afstand van bronindex 710 tot...
       Centrumindex 0:
              24 - 15.992481203007529 = 8.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 64.50513030697027
       Euclidische afstand: 8.031508594714337
       Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 909.841704007305
       Euclidische afstand: 30.163582413355762
       Centrumindex 2:
              24 - 31.63235294117647 = -7.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 58.61046232218378
       Euclidische afstand: 7.655747012681635
  ._____
{0: 8.031508594714337, 1: 30.163582413355762, 2: 7.655747012681635}
_____
Afstand van bronindex 711 tot...
       Centrumindex 0:
              27 - 15.992481203007529 = 11.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 121.30964158516569
       Euclidische afstand: 11.014065624698524
       Centrumindex 1:
              27 - 54.156682027649765 = -27.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 737.6112892607613
       Euclidische afstand: 27.159000152081468
       Centrumindex 2:
              27 - 31.63235294117647 = -4.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 21.620266243752408
       Euclidische afstand: 4.649759804952553
  -----
```

{0: 11.014065624698524, 1: 27.159000152081468, 2: 4.649759804952553}

```
Afstand van bronindex 712 tot...
       Centrumindex 0:
              48 - 15.992481203007529 = 32.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1024.866032562609
       Euclidische afstand: 32.01352889892973
   -----
       Centrumindex 1:
              48 - 54.156682027649765 = -6.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 38.32096668011632
       Euclidische afstand: 6.190393095766724
       ______
       Centrumindex 2:
              48 - 31.63235294117647 = 16.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 268.2575211457132
       Euclidische afstand: 16.37856895903037
{0: 32.01352889892973, 1: 6.190393095766724, 2: 16.37856895903037}
Afstand van bronindex 713 tot...
       Centrumindex 0:
              29 - 15.992481203007529 = 13.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 169.3397167731356
       Euclidische afstand: 13.013059470129829
       Centrumindex 1:
              29 - 54.156682027649765 = -25.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 632.9845611501622
       Euclidische afstand: 25.15918442935228
       Centrumindex 2:
              29 - 31.63235294117647 = -2.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 7.090854479046523
       Euclidische afstand: 2.662865839475681
  ______
{0: 13.013059470129829, 1: 25.15918442935228, 2: 2.662865839475681}
_____
Afstand van bronindex 714 tot...
      Centrumindex 0:
```

```
52 - 15.992481203007529 = 36.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1296.6855814347891
       Euclidische afstand: 36.00952070542996
          _____
       Centrumindex 1:
              52 - 54.156682027649765 = -2.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 4.777187878273038
       Euclidische afstand: 2.1856778990219574
 _____
       Centrumindex 2:
              52 - 31.63235294117647 = 20.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 415.0026191849289
       Euclidische afstand: 20.37161307272767
   _____
{0: 36.00952070542996, 1: 2.1856778990219574, 2: 20.37161307272767}
Afstand van bronindex 715 tot...
       Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 9.189340833286163
       Euclidische afstand: 3.031392556777522
       Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1236.1182017031574
       Euclidische afstand: 35.15847268729342
       Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 159.73791330257595
       Euclidische afstand: 12.638746508359757
{0: 3.031392556777522, 1: 35.15847268729342, 2: 12.638746508359757}
_____
Afstand van bronindex 716 tot...
       Centrumindex 0:
              38 - 15.992481203007529 = 22.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 484.71565662275947
```

Euclidische afstand: 22.016258915237152

```
Centrumindex 1:
              38 - 54.156682027649765 = -16.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 261.45460723311163
       Euclidische afstand: 16.169558040747795
       Centrumindex 2:
              38 - 31.63235294117647 = 6.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 40.90457996924259
       Euclidische afstand: 6.395668844557432
{0: 22.016258915237152, 1: 16.169558040747795, 2: 6.395668844557432}
  _____
Afstand van bronindex 717 tot...
       Centrumindex 0:
              27 - 15.992481203007529 = 11.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 121.5502430889251
       Euclidische afstand: 11.02498267975624
 _____
       Centrumindex 1:
              27 - 54.156682027649765 = -27.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 737.9016118414064
       Euclidische afstand: 27.16434449496999
        ______
       Centrumindex 2:
              27 - 31.63235294117647 = -4.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 21.816344675124956
       Euclidische afstand: 4.67079700641389
{0: 11.02498267975624, 1: 27.16434449496999, 2: 4.67079700641389}
______
Afstand van bronindex 718 tot...
       Centrumindex 0:
              27 - 15.992481203007529 = 11.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 121.30964158516569
       Euclidische afstand: 11.014065624698524
 ._____
       Centrumindex 1:
              27 - 54.156682027649765 = -27.156682027649765
```

0 - 0.3548387096774193 = -0.3548387096774193

```
Totale euclidische som: 737.6112892607613
      Euclidische afstand: 27.159000152081468
      Centrumindex 2:
              27 - 31.63235294117647 = -4.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 21.620266243752408
      Euclidische afstand: 4.649759804952553
     ._____
{0: 11.014065624698524, 1: 27.159000152081468, 2: 4.649759804952553}
_____
Afstand van bronindex 719 tot...
      Centrumindex 0:
              33 - 15.992481203007529 = 17.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 289.39986714907536
      Euclidische afstand: 17.011756733185297
      Centrumindex 1:
              33 - 54.156682027649765 = -21.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 447.73110492896416
      Euclidische afstand: 21.15965748609755
 ._____
       Centrumindex 2:
              33 - 31.63235294117647 = 1.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.0320309496347546
       Euclidische afstand: 1.4254932303012717
   -----
{0: 17.011756733185297, 1: 21.15965748609755, 2: 1.4254932303012717}
_____
Afstand van bronindex 720 tot...
      Centrumindex 0:
              6 - 15.992481203007529 = -9.992481203007529
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 100.2344536152413
      Euclidische afstand: 10.011715817742797
      Centrumindex 1:
              6 - 54.156682027649765 = -48.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 2319.4822570026963
      Euclidische afstand: 48.16100348832753
```

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Centrumindex 2:

```
6 - 31.63235294117647 = -25.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 657.3751682045367
      Euclidische afstand: 25.639328544338614
  _____
{0: 10.011715817742797, 1: 48.16100348832753, 2: 25.639328544338614}
  -----
Afstand van bronindex 721 tot...
      Centrumindex 0:
              17 - 15.992481203007529 = 1.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1.1592656453162782
      Euclidische afstand: 1.0766919918510949
       -----
      Centrumindex 1:
              17 - 54.156682027649765 = -37.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1380.7449298137565
      Euclidische afstand: 37.158376307553546
          ._____
       Centrumindex 2:
              17 - 31.63235294117647 = -14.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 214.26732506728183
      Euclidische afstand: 14.637872969365523
{0: 1.0766919918510949, 1: 37.158376307553546, 2: 14.637872969365523}
_____
Afstand van bronindex 722 tot...
      Centrumindex 0:
              34 - 15.992481203007529 = 18.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 324.41490474306033
      Euclidische afstand: 18.011521444427185
      Centrumindex 1:
              34 - 54.156682027649765 = -20.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 406.4177408736646
      Euclidische afstand: 20.159805080249775
       .____
      Centrumindex 2:
              34 - 31.63235294117647 = 2.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 5.767325067281813
```

Euclidische afstand: 2.401525570815729

```
{0: 18.011521444427185, 1: 20.159805080249775, 2: 2.401525570815729}
_____
Afstand van bronindex 723 tot...
      Centrumindex 0:
             50 - 15.992481203007529 = 34.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1156.6555062468194
      Euclidische afstand: 34.009638431580235
          _____
      Centrumindex 1:
             50 - 54.156682027649765 = -4.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 17.4039159888721
      Euclidische afstand: 4.171800089754074
  _____
      Centrumindex 2:
             50 - 31.63235294117647 = 18.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 337.53203094963476
      Euclidische afstand: 18.372044822219294
  -----
{0: 34.009638431580235, 1: 4.171800089754074, 2: 18.372044822219294}
Afstand van bronindex 724 tot...
      Centrumindex 0:
             27 - 15.992481203007529 = 11.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 121.5502430889251
      Euclidische afstand: 11.02498267975624
      Centrumindex 1:
             27 - 54.156682027649765 = -27.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 737.9016118414064
      Euclidische afstand: 27.16434449496999
      Centrumindex 2:
             27 - 31.63235294117647 = -4.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 21.816344675124956
      Euclidische afstand: 4.67079700641389
   _____
{0: 11.02498267975624, 1: 27.16434449496999, 2: 4.67079700641389}
```

```
Afstand van bronindex 725 tot...
       Centrumindex 0:
               20 - 15.992481203007529 = 4.007518796992471
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 16.204378427271106
       Euclidische afstand: 4.025466237253904
       Centrumindex 1:
               20 - 54.156682027649765 = -34.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1166.804837647858
       Euclidische afstand: 34.158525109375816
       Centrumindex 2:
               20 - 31.63235294117647 = -11.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 135.473207420223
       Euclidische afstand: 11.639295830084524
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
    -----
Afstand van bronindex 726 tot...
       Centrumindex 0:
               30 - 15.992481203007529 = 14.007518796992471
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 196.59535587087993
       Euclidische afstand: 14.021246587621228
        ._____
       Centrumindex 1:
               30 - 54.156682027649765 = -24.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 583.9615196755078
       Euclidische afstand: 24.16529577049509
       Centrumindex 2:
               30 - 31.63235294117647 = -1.632352941176471
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 3.02222702806613
       Euclidische afstand: 1.738455356937914
{0: 14.021246587621228, 1: 24.16529577049509, 2: 1.738455356937914}
______
Afstand van bronindex 727 tot...
       Centrumindex 0:
               27 - 15.992481203007529 = 11.007518796992471
```

1 - 0.3796992481203007 = 0.6203007518796992

```
Totale euclidische som: 121.5502430889251
      Euclidische afstand: 11.02498267975624
      Centrumindex 1:
              27 - 54.156682027649765 = -27.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 737.9016118414064
      Euclidische afstand: 27.16434449496999
   _____
      Centrumindex 2:
              27 - 31.63235294117647 = -4.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 21.816344675124956
      Euclidische afstand: 4.67079700641389
  _____
{0: 11.02498267975624, 1: 27.16434449496999, 2: 4.67079700641389}
_____
Afstand van bronindex 728 tot...
      Centrumindex 0:
              25 - 15.992481203007529 = 9.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 81.27956639719581
      Euclidische afstand: 9.01551808811872
 ._____
       Centrumindex 1:
              25 - 54.156682027649765 = -29.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 850.2380173713603
      Euclidische afstand: 29.158841152750917
 ._____
       Centrumindex 2:
              25 - 31.63235294117647 = -6.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 44.14967800845829
      Euclidische afstand: 6.644522406347825
{0: 9.01551808811872, 1: 29.158841152750917, 2: 6.644522406347825}
Afstand van bronindex 729 tot...
      Centrumindex 0:
              25 - 15.992481203007529 = 9.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 81.27956639719581
      Euclidische afstand: 9.01551808811872
```

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Centrumindex 1:

```
25 - 54.156682027649765 = -29.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 850.2380173713603
      Euclidische afstand: 29.158841152750917
          ._____
      Centrumindex 2:
             25 - 31.63235294117647 = -6.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 44.14967800845829
      Euclidische afstand: 6.644522406347825
  ______
{0: 9.01551808811872, 1: 29.158841152750917, 2: 6.644522406347825}
______
Afstand van bronindex 730 tot...
      Centrumindex 0:
             29 - 15.992481203007529 = 13.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 169.58031827689499
      Euclidische afstand: 13.022300805805976
      Centrumindex 1:
             29 - 54.156682027649765 = -25.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 633.2748837308073
      Euclidische afstand: 25.164953481594345
 _____
      Centrumindex 2:
             29 - 31.63235294117647 = -2.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 7.286932910419072
      Euclidische afstand: 2.6994319606945223
 _____
{0: 13.022300805805976, 1: 25.164953481594345, 2: 2.6994319606945223}
  _____
Afstand van bronindex 731 tot...
      Centrumindex 0:
             11 - 15.992481203007529 = -4.992481203007529
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 25.069040081406623
      Euclidische afstand: 5.00689924817812
       .____
      Centrumindex 1:
             11 - 54.156682027649765 = -43.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1862.6251141455537
```

Euclidische afstand: 43.15814076330853

```
Centrumindex 2:
              11 - 31.63235294117647 = -20.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 425.8555603613995
       Euclidische afstand: 20.636268082223577
{0: 5.00689924817812, 1: 43.15814076330853, 2: 20.636268082223577}
Afstand van bronindex 732 tot...
       Centrumindex 0:
              27 - 15.992481203007529 = 11.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 121.30964158516569
       Euclidische afstand: 11.014065624698524
       Centrumindex 1:
              27 - 54.156682027649765 = -27.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 737.6112892607613
       Euclidische afstand: 27.159000152081468
 _____
       Centrumindex 2:
              27 - 31.63235294117647 = -4.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 21.620266243752408
       Euclidische afstand: 4.649759804952553
{0: 11.014065624698524, 1: 27.159000152081468, 2: 4.649759804952553}
_____
Afstand van bronindex 733 tot...
       Centrumindex 0:
              23 - 15.992481203007529 = 7.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 49.24949120922594
       Euclidische afstand: 7.017798173873764
       Centrumindex 1:
              23 - 54.156682027649765 = -31.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 970.8647454819594
       Euclidische afstand: 31.158702564162702
 ._____
       Centrumindex 2:
              23 - 31.63235294117647 = -8.632352941176471
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 74.67908977316418
      Euclidische afstand: 8.641706415585071
{0: 7.017798173873764, 1: 31.158702564162702, 2: 8.641706415585071}
_____
Afstand van bronindex 734 tot...
      Centrumindex 0:
              23 - 15.992481203007529 = 7.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 49.24949120922594
      Euclidische afstand: 7.017798173873764
 _____
      Centrumindex 1:
              23 - 54.156682027649765 = -31.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 970.8647454819594
      Euclidische afstand: 31.158702564162702
      Centrumindex 2:
              23 - 31.63235294117647 = -8.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 74.67908977316418
      Euclidische afstand: 8.641706415585071
   _____
{0: 7.017798173873764, 1: 31.158702564162702, 2: 8.641706415585071}
_____
Afstand van bronindex 735 tot...
      Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 144.32467917915065
      Euclidische afstand: 12.013520682096097
      Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 684.2979252054618
      Euclidische afstand: 26.1590887686376
      Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 13.355560361399464
      Euclidische afstand: 3.6545260104970474
  ._____
```

{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}

```
_____
Afstand van bronindex 736 tot...
      Centrumindex 0:
             48 - 15.992481203007529 = 32.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1024.6254310588495
      Euclidische afstand: 32.00977086857776
   -----
      Centrumindex 1:
             48 - 54.156682027649765 = -6.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 38.03064409947116
      Euclidische afstand: 6.16689906674912
  _____
      Centrumindex 2:
             48 - 31.63235294117647 = 16.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 268.06144271434067
      Euclidische afstand: 16.372582041765455
{0: 32.00977086857776, 1: 6.16689906674912, 2: 16.372582041765455}
Afstand van bronindex 737 tot...
      Centrumindex 0:
             35 - 15.992481203007529 = 19.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 361.6705438408046
      Euclidische afstand: 19.017637704005317
 _____
      Centrumindex 1:
             35 - 54.156682027649765 = -19.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 367.3946993990102
      Euclidische afstand: 19.16754286284526
      Centrumindex 2:
             35 - 31.63235294117647 = 3.367647058823529
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 11.69869761630142
      Euclidische afstand: 3.420335892321311
 _____
{0: 19.017637704005317, 1: 19.16754286284526, 2: 3.420335892321311}
_____
Afstand van bronindex 738 tot...
      Centrumindex 0:
```

```
82 - 15.992481203007529 = 66.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 4357.136709254338
       Euclidische afstand: 66.0086108720244
          -----
       Centrumindex 1:
              82 - 54.156682027649765 = 27.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 775.3762662192871
       Euclidische afstand: 27.845578934891748
          _____
       Centrumindex 2:
              82 - 31.63235294117647 = 50.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2537.0614427143405
       Euclidische afstand: 50.36925096439633
   _____
{0: 66.0086108720244, 1: 27.845578934891748, 2: 50.36925096439633}
Afstand van bronindex 739 tot...
       Centrumindex 0:
              82 - 15.992481203007529 = 66.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 4357.136709254338
       Euclidische afstand: 66.0086108720244
       Centrumindex 1:
              82 - 54.156682027649765 = 27.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 775.3762662192871
       Euclidische afstand: 27.845578934891748
       Centrumindex 2:
              82 - 31.63235294117647 = 50.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2537.0614427143405
       Euclidische afstand: 50.36925096439633
{0: 66.0086108720244, 1: 27.845578934891748, 2: 50.36925096439633}
_____
Afstand van bronindex 740 tot...
       Centrumindex 0:
              82 - 15.992481203007529 = 66.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 4357.377310758097
       Euclidische afstand: 66.01043334775267
```

```
Centrumindex 1:
              82 - 54.156682027649765 = 27.843317972350235
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 775.6665887999322
       Euclidische afstand: 27.85079152914567
       Centrumindex 2:
              82 - 31.63235294117647 = 50.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 2537.2575211457133
       Euclidische afstand: 50.371197336828445
{0: 66.01043334775267, 1: 27.85079152914567, 2: 50.371197336828445}
   -----
Afstand van bronindex 741 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 400.4449799310302
       Euclidische afstand: 20.011121406133896
 _____
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 329.79101276306557
       Euclidische afstand: 18.160149029208586
        -----
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 19.23791330257593
       Euclidische afstand: 4.386104570410506
{0: 20.011121406133896, 1: 18.160149029208586, 2: 4.386104570410506}
______
Afstand van bronindex 742 tot...
       Centrumindex 0:
              21 - 15.992481203007529 = 5.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 25.46001752501545
       Euclidische afstand: 5.0457920612145175
 ._____
       Centrumindex 1:
              21 - 54.156682027649765 = -33.156682027649765
```

1 - 0.3548387096774193 = 0.6451612903225807

```
Totale euclidische som: 1099.7817961732037
       Euclidische afstand: 33.162958193942885
      Centrumindex 2:
              21 - 31.63235294117647 = -10.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 113.4045799692426
      Euclidische afstand: 10.649158650768737
      ._____
{0: 5.0457920612145175, 1: 33.162958193942885, 2: 10.649158650768737}
_____
Afstand van bronindex 743 tot...
      Centrumindex 0:
              24 - 15.992481203007529 = 8.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 64.26452880321087
      Euclidische afstand: 8.016516001556466
      Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 909.5513814266599
      Euclidische afstand: 30.158769560886597
 ._____
       Centrumindex 2:
              24 - 31.63235294117647 = -7.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 58.41438389081123
       Euclidische afstand: 7.642930320944397
   _____
{0: 8.016516001556466, 1: 30.158769560886597, 2: 7.642930320944397}
_____
Afstand van bronindex 744 tot...
      Centrumindex 0:
              31 - 15.992481203007529 = 15.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 225.61039346486487
      Euclidische afstand: 15.020332668248892
      Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 536.6481556202083
      Euclidische afstand: 23.165667605752446
```

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Centrumindex 2:

```
31 - 31.63235294117647 = -0.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 0.7575211457131878
      Euclidische afstand: 0.8703569070865055
  _____
{0: 15.020332668248892, 1: 23.165667605752446, 2: 0.8703569070865055}
------
Afstand van bronindex 745 tot...
      Centrumindex 0:
             70 - 15.992481203007529 = 54.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 2916.956258126518
      Euclidische afstand: 54.0088535161275
       -----
      Centrumindex 1:
             70 - 54.156682027649765 = 15.843317972350235
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 251.13663488288148
      Euclidische afstand: 15.84729108973775
          ._____
      Centrumindex 2:
             70 - 31.63235294117647 = 38.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 1472.2379133025759
      Euclidische afstand: 38.36975258328591
 _____
{0: 54.0088535161275, 1: 15.84729108973775, 2: 38.36975258328591}
_____
Afstand van bronindex 746 tot...
      Centrumindex 0:
             16 - 15.992481203007529 = 0.007518796992471266
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 0.14422805133133568
      Euclidische afstand: 0.3797736843586397
      Centrumindex 1:
             16 - 54.156682027649765 = -38.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1456.0582938690561
      Euclidische afstand: 38.15833190626991
       .____
      Centrumindex 2:
             16 - 31.63235294117647 = -15.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 244.53203094963476
```

Euclidische afstand: 15.637519974396028

```
{0: 0.3797736843586397, 1: 38.15833190626991, 2: 15.637519974396028}
_____
Afstand van bronindex 747 tot...
      Centrumindex 0:
             30 - 15.992481203007529 = 14.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 196.59535587087993
      Euclidische afstand: 14.021246587621228
         _____
      Centrumindex 1:
             30 - 54.156682027649765 = -24.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 583.9615196755078
      Euclidische afstand: 24.16529577049509
  _____
      Centrumindex 2:
             30 - 31.63235294117647 = -1.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 3.02222702806613
      Euclidische afstand: 1.738455356937914
  _____
{0: 14.021246587621228, 1: 24.16529577049509, 2: 1.738455356937914}
Afstand van bronindex 748 tot...
      Centrumindex 0:
             19 - 15.992481203007529 = 3.0075187969924713
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 9.189340833286163
      Euclidische afstand: 3.031392556777522
      Centrumindex 1:
             19 - 54.156682027649765 = -35.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1236.1182017031574
      Euclidische afstand: 35.15847268729342
      Centrumindex 2:
             19 - 31.63235294117647 = -12.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 159.73791330257595
      Euclidische afstand: 12.638746508359757
    _____
{0: 3.031392556777522, 1: 35.15847268729342, 2: 12.638746508359757}
```

```
Afstand van bronindex 749 tot...
       Centrumindex 0:
               31 - 15.992481203007529 = 15.007518796992471
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 225.36979196110548
       Euclidische afstand: 15.012321338191022
       Centrumindex 1:
               31 - 54.156682027649765 = -23.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 536.3578330395632
       Euclidische afstand: 23.159400532819564
       Centrumindex 2:
               31 - 31.63235294117647 = -0.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 0.5614427143406386
       Euclidische afstand: 0.7492948113664198
{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}
   _____
Afstand van bronindex 750 tot...
       Centrumindex 0:
               4 - 15.992481203007529 = -11.992481203007529
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 144.20437842727142
       Euclidische afstand: 12.008512748349457
        ._____
       Centrumindex 1:
               4 - 54.156682027649765 = -50.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 2516.1089851132956
       Euclidische afstand: 50.160831184434095
       Centrumindex 2:
               4 - 31.63235294117647 = -27.63235294117647
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 763.9045799692426
       Euclidische afstand: 27.63882378049476
{0: 12.008512748349457, 1: 50.160831184434095, 2: 27.63882378049476}
______
Afstand van bronindex 751 tot...
       Centrumindex 0:
               6 - 15.992481203007529 = -9.992481203007529
```

1 - 0.3796992481203007 = 0.6203007518796992

```
Totale euclidische som: 100.2344536152413
      Euclidische afstand: 10.011715817742797
      Centrumindex 1:
              6 - 54.156682027649765 = -48.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 2319.4822570026963
      Euclidische afstand: 48.16100348832753
  -----
      Centrumindex 2:
              6 - 31.63235294117647 = -25.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 657.3751682045367
      Euclidische afstand: 25.639328544338614
  ______
{0: 10.011715817742797, 1: 48.16100348832753, 2: 25.639328544338614}
_____
Afstand van bronindex 752 tot...
      Centrumindex 0:
              33 - 15.992481203007529 = 17.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 289.39986714907536
      Euclidische afstand: 17.011756733185297
 ._____
       Centrumindex 1:
              33 - 54.156682027649765 = -21.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 447.73110492896416
      Euclidische afstand: 21.15965748609755
 _____
       Centrumindex 2:
              33 - 31.63235294117647 = 1.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 2.0320309496347546
      Euclidische afstand: 1.4254932303012717
{0: 17.011756733185297, 1: 21.15965748609755, 2: 1.4254932303012717}
Afstand van bronindex 753 tot...
      Centrumindex 0:
              23 - 15.992481203007529 = 7.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 49.24949120922594
      Euclidische afstand: 7.017798173873764
```

Centrumindex 1:

```
23 - 54.156682027649765 = -31.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 970.8647454819594
      Euclidische afstand: 31.158702564162702
         -----
      Centrumindex 2:
             23 - 31.63235294117647 = -8.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 74.67908977316418
      Euclidische afstand: 8.641706415585071
  _____
{0: 7.017798173873764, 1: 31.158702564162702, 2: 8.641706415585071}
______
Afstand van bronindex 754 tot...
      Centrumindex 0:
             48 - 15.992481203007529 = 32.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1024.866032562609
      Euclidische afstand: 32.01352889892973
         -----
      Centrumindex 1:
             48 - 54.156682027649765 = -6.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 38.32096668011632
      Euclidische afstand: 6.190393095766724
      Centrumindex 2:
             48 - 31.63235294117647 = 16.36764705882353
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 268.2575211457132
      Euclidische afstand: 16.37856895903037
 _____
{0: 32.01352889892973, 1: 6.190393095766724, 2: 16.37856895903037}
  -----
Afstand van bronindex 755 tot...
      Centrumindex 0:
             67 - 15.992481203007529 = 51.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 2602.151746848323
      Euclidische afstand: 51.011290386034375
       ._____
      Centrumindex 1:
             67 - 54.156682027649765 = 12.843317972350235
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 165.36704962942525
```

Euclidische afstand: 12.85951202921111

```
Centrumindex 2:
              67 - 31.63235294117647 = 35.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 1251.2281093810072
       Euclidische afstand: 35.372702884865994
{0: 51.011290386034375, 1: 12.85951202921111, 2: 35.372702884865994}
Afstand van bronindex 756 tot...
       Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 144.32467917915065
       Euclidische afstand: 12.013520682096097
       Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 684.2979252054618
       Euclidische afstand: 26.1590887686376
 _____
       Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 13.355560361399464
       Euclidische afstand: 3.6545260104970474
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
_____
Afstand van bronindex 757 tot...
       Centrumindex 0:
              18 - 15.992481203007529 = 2.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 4.174303239301221
       Euclidische afstand: 2.0431111666527646
       Centrumindex 1:
              18 - 54.156682027649765 = -36.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1307.431565758457
       Euclidische afstand: 36.15842316471305
 ._____
       Centrumindex 2:
              18 - 31.63235294117647 = -13.632352941176471
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 186.00261918492888
      Euclidische afstand: 13.638277720626196
{0: 2.0431111666527646, 1: 36.15842316471305, 2: 13.638277720626196}
_____
Afstand van bronindex 758 tot...
       Centrumindex 0:
              34 - 15.992481203007529 = 18.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 324.41490474306033
      Euclidische afstand: 18.011521444427185
 _____
       Centrumindex 1:
              34 - 54.156682027649765 = -20.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 406.4177408736646
      Euclidische afstand: 20.159805080249775
      Centrumindex 2:
              34 - 31.63235294117647 = 2.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 5.767325067281813
      Euclidische afstand: 2.401525570815729
  -----
{0: 18.011521444427185, 1: 20.159805080249775, 2: 2.401525570815729}
_____
Afstand van bronindex 759 tot...
      Centrumindex 0:
              33 - 15.992481203007529 = 17.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 289.6404686528347
      Euclidische afstand: 17.018826888268027
      Centrumindex 1:
              33 - 54.156682027649765 = -21.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 448.0214275096093
      Euclidische afstand: 21.166516659800433
      Centrumindex 2:
              33 - 31.63235294117647 = 1.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 2.228109381007304
      Euclidische afstand: 1.492685292018148
  .....
```

{0: 17.018826888268027, 1: 21.166516659800433, 2: 1.492685292018148}

```
_____
Afstand van bronindex 760 tot...
       Centrumindex 0:
              72 - 15.992481203007529 = 56.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 3136.986333314488
       Euclidische afstand: 56.00880585510182
       Centrumindex 1:
              72 - 54.156682027649765 = 17.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 318.5099067722825
       Euclidische afstand: 17.84684584940102
       _____
       Centrumindex 2:
              72 - 31.63235294117647 = 40.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 1629.70850153787
       Euclidische afstand: 40.36964827116865
{0: 56.00880585510182, 1: 17.84684584940102, 2: 40.36964827116865}
Afstand van bronindex 761 tot...
       Centrumindex 0:
              41 - 15.992481203007529 = 25.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 625.5201679009549
       Euclidische afstand: 25.01040119432223
       Centrumindex 1:
              41 - 54.156682027649765 = -13.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 173.22419248656786
       Euclidische afstand: 13.161466198207853
       Centrumindex 2:
              41 - 31.63235294117647 = 9.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 87.91438389081122
       Euclidische afstand: 9.376267055220389
 _____
{0: 25.01040119432223, 1: 13.161466198207853, 2: 9.376267055220389}
_____
Afstand van bronindex 762 tot...
```

Centrumindex 0:

```
20 - 15.992481203007529 = 4.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 16.444979931030506
       Euclidische afstand: 4.05524104475067
          -----
       Centrumindex 1:
              20 - 54.156682027649765 = -34.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1167.0951602285033
       Euclidische afstand: 34.162774480836646
 _____
       Centrumindex 2:
              20 - 31.63235294117647 = -11.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 135.66928585159556
       Euclidische afstand: 11.64771590706073
   _____
{0: 4.05524104475067, 1: 34.162774480836646, 2: 11.64771590706073}
Afstand van bronindex 763 tot...
       Centrumindex 0:
              36 - 15.992481203007529 = 20.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 400.6855814347896
       Euclidische afstand: 20.017132198064477
 _____
       Centrumindex 1:
              36 - 54.156682027649765 = -18.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 330.0813353437107
       Euclidische afstand: 18.168140668315807
       Centrumindex 2:
              36 - 31.63235294117647 = 4.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 19.433991733948478
       Euclidische afstand: 4.408400133149041
{0: 20.017132198064477, 1: 18.168140668315807, 2: 4.408400133149041}
_____
Afstand van bronindex 764 tot...
       Centrumindex 0:
              16 - 15.992481203007529 = 0.007518796992471266
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 0.14422805133133568
```

Euclidische afstand: 0.3797736843586397

```
Centrumindex 1:
              16 - 54.156682027649765 = -38.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1456.0582938690561
       Euclidische afstand: 38.15833190626991
       Centrumindex 2:
              16 - 31.63235294117647 = -15.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 244.53203094963476
       Euclidische afstand: 15.637519974396028
{0: 0.3797736843586397, 1: 38.15833190626991, 2: 15.637519974396028}
  _____
Afstand van bronindex 765 tot...
       Centrumindex 0:
              51 - 15.992481203007529 = 35.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1225.911145344564
       Euclidische afstand: 35.01301394259803
 ______
       Centrumindex 1:
              51 - 54.156682027649765 = -3.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 10.38087451421773
       Euclidische afstand: 3.221936454093676
        ______
       Centrumindex 2:
              51 - 31.63235294117647 = 19.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 375.4634034986544
       Euclidische afstand: 19.37687806378144
{0: 35.01301394259803, 1: 3.221936454093676, 2: 19.37687806378144}
_____
Afstand van bronindex 766 tot...
       Centrumindex 0:
              72 - 15.992481203007529 = 56.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 3136.986333314488
       Euclidische afstand: 56.00880585510182
 ._____
       Centrumindex 1:
              72 - 54.156682027649765 = 17.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
```

```
Totale euclidische som: 318.5099067722825
       Euclidische afstand: 17.84684584940102
       Centrumindex 2:
              72 - 31.63235294117647 = 40.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 1629.70850153787
       Euclidische afstand: 40.36964827116865
     -----
{0: 56.00880585510182, 1: 17.84684584940102, 2: 40.36964827116865}
_____
Afstand van bronindex 767 tot...
       Centrumindex 0:
              30 - 15.992481203007529 = 14.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 196.35475436712053
       Euclidische afstand: 14.012664071015209
       Centrumindex 1:
              30 - 54.156682027649765 = -24.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 583.6711970948627
       Euclidische afstand: 24.159288008856194
 ._____
       Centrumindex 2:
              30 - 31.63235294117647 = -1.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.8261485966935807
       Euclidische afstand: 1.681115283582176
{0: 14.012664071015209, 1: 24.159288008856194, 2: 1.681115283582176}
_____
Afstand van bronindex 768 tot...
       Centrumindex 0:
              62 - 15.992481203007529 = 46.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 2116.835957374639
       Euclidische afstand: 46.009085595941144
       Centrumindex 1:
              62 - 54.156682027649765 = 7.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 61.64354732527774
       Euclidische afstand: 7.85134047951544
```

Centrumindex 2:

```
62 - 31.63235294117647 = 30.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 922.3555603613994
      Euclidische afstand: 30.370307215459633
  _____
{0: 46.009085595941144, 1: 7.85134047951544, 2: 30.370307215459633}
._____
Afstand van bronindex 769 tot...
      Centrumindex 0:
              32 - 15.992481203007529 = 16.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 256.38482955509045
      Euclidische afstand: 16.01202140752661
       ._____
      Centrumindex 1:
              32 - 54.156682027649765 = -22.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 491.0444689842637
      Euclidische afstand: 22.15952321202475
       Centrumindex 2:
              32 - 31.63235294117647 = 0.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 0.2967368319876966
      Euclidische afstand: 0.5447355615229252
 _____
{0: 16.01202140752661, 1: 22.15952321202475, 2: 0.5447355615229252}
_____
Afstand van bronindex 770 tot...
      Centrumindex 0:
              24 - 15.992481203007529 = 8.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 64.26452880321087
      Euclidische afstand: 8.016516001556466
      Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 909.5513814266599
      Euclidische afstand: 30.158769560886597
       .____
      Centrumindex 2:
              24 - 31.63235294117647 = -7.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 58.41438389081123
```

Euclidische afstand: 7.642930320944397

```
{0: 8.016516001556466, 1: 30.158769560886597, 2: 7.642930320944397}
_____
Afstand van bronindex 771 tot...
      Centrumindex 0:
              48 - 15.992481203007529 = 32.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1024.6254310588495
      Euclidische afstand: 32.00977086857776
       Centrumindex 1:
              48 - 54.156682027649765 = -6.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 38.03064409947116
      Euclidische afstand: 6.16689906674912
 _____
      Centrumindex 2:
              48 - 31.63235294117647 = 16.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 268.06144271434067
      Euclidische afstand: 16.372582041765455
  ._____
{0: 32.00977086857776, 1: 6.16689906674912, 2: 16.372582041765455}
Afstand van bronindex 772 tot...
      Centrumindex 0:
              57 - 15.992481203007529 = 41.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1681.760769404714
      Euclidische afstand: 41.00927662620634
      Centrumindex 1:
              57 - 54.156682027649765 = 2.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 8.210367601775387
      Euclidische afstand: 2.865373902612953
       Centrumindex 2:
              57 - 31.63235294117647 = 25.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 643.6790897731642
       Euclidische afstand: 25.370831475794485
    _____
{0: 41.00927662620634, 1: 2.865373902612953, 2: 25.370831475794485}
```

\_\_\_\_\_\_

```
Afstand van bronindex 773 tot...
       Centrumindex 0:
               62 - 15.992481203007529 = 46.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 2116.835957374639
       Euclidische afstand: 46.009085595941144
       Centrumindex 1:
               62 - 54.156682027649765 = 7.843317972350235
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 61.64354732527774
       Euclidische afstand: 7.85134047951544
       Centrumindex 2:
               62 - 31.63235294117647 = 30.36764705882353
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 922.3555603613994
       Euclidische afstand: 30.370307215459633
{0: 46.009085595941144, 1: 7.85134047951544, 2: 30.370307215459633}
    _____
Afstand van bronindex 774 tot...
       Centrumindex 0:
              54 - 15.992481203007529 = 38.00751879699247
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1444.9562581265186
       Euclidische afstand: 38.0125802613624
        _____
       Centrumindex 1:
               54 - 54.156682027649765 = -0.15668202764976513
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 0.44078234831913904
       Euclidische afstand: 0.6639144133991512
       Centrumindex 2:
               54 - 31.63235294117647 = 22.36764705882353
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 500.66928585159553
       Euclidische afstand: 22.3756404567913
{0: 38.0125802613624, 1: 0.6639144133991512, 2: 22.3756404567913}
______
Afstand van bronindex 775 tot...
       Centrumindex 0:
               18 - 15.992481203007529 = 2.0075187969924713
```

0 - 0.3796992481203007 = -0.3796992481203007

```
Totale euclidische som: 4.174303239301221
      Euclidische afstand: 2.0431111666527646
      Centrumindex 1:
              18 - 54.156682027649765 = -36.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1307.431565758457
      Euclidische afstand: 36.15842316471305
   _____
      Centrumindex 2:
              18 - 31.63235294117647 = -13.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 186.00261918492888
      Euclidische afstand: 13.638277720626196
  -----
{0: 2.0431111666527646, 1: 36.15842316471305, 2: 13.638277720626196}
_____
Afstand van bronindex 776 tot...
      Centrumindex 0:
              62 - 15.992481203007529 = 46.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 2116.835957374639
      Euclidische afstand: 46.009085595941144
 ._____
       Centrumindex 1:
              62 - 54.156682027649765 = 7.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 61.64354732527774
      Euclidische afstand: 7.85134047951544
 ._____
       Centrumindex 2:
              62 - 31.63235294117647 = 30.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 922.3555603613994
      Euclidische afstand: 30.370307215459633
{0: 46.009085595941144, 1: 7.85134047951544, 2: 30.370307215459633}
Afstand van bronindex 777 tot...
      Centrumindex 0:
              5 - 15.992481203007529 = -10.992481203007529
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 121.21941602125636
      Euclidische afstand: 11.009968938251205
```

Centrumindex 1:

```
5 - 54.156682027649765 = -49.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 2416.795621057996
      Euclidische afstand: 49.16091558400836
         -----
      Centrumindex 2:
             5 - 31.63235294117647 = -26.63235294117647
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 709.6398740868897
      Euclidische afstand: 26.639066689486132
  _____
{0: 11.009968938251205, 1: 49.16091558400836, 2: 26.639066689486132}
______
Afstand van bronindex 778 tot...
      Centrumindex 0:
             62 - 15.992481203007529 = 46.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 2116.835957374639
      Euclidische afstand: 46.009085595941144
         ._____
      Centrumindex 1:
             62 - 54.156682027649765 = 7.843317972350235
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 61.64354732527774
      Euclidische afstand: 7.85134047951544
_____
      Centrumindex 2:
             62 - 31.63235294117647 = 30.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 922.3555603613994
      Euclidische afstand: 30.370307215459633
 _____
{0: 46.009085595941144, 1: 7.85134047951544, 2: 30.370307215459633}
 _____
Afstand van bronindex 779 tot...
      Centrumindex 0:
             43 - 15.992481203007529 = 27.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 729.7908445926842
      Euclidische afstand: 27.014641300463055
       .____
      Centrumindex 1:
             43 - 54.156682027649765 = -11.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 124.88778695661397
```

Euclidische afstand: 11.175320440891793

```
Centrumindex 2:
              43 - 31.63235294117647 = 11.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 129.5810505574779
       Euclidische afstand: 11.383367276754182
{0: 27.014641300463055, 1: 11.175320440891793, 2: 11.383367276754182}
Afstand van bronindex 780 tot...
       Centrumindex 0:
              13 - 15.992481203007529 = -2.9924812030075287
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 9.339716773135907
       Euclidische afstand: 3.0560950203054724
       Centrumindex 1:
              13 - 54.156682027649765 = -41.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1694.2887086156
       Euclidische afstand: 41.161738406141204
 _____
       Centrumindex 2:
              13 - 31.63235294117647 = -18.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 347.52222702806614
       Euclidische afstand: 18.64194804810018
{0: 3.0560950203054724, 1: 41.161738406141204, 2: 18.64194804810018}
_____
Afstand van bronindex 781 tot...
       Centrumindex 0:
              17 - 15.992481203007529 = 1.0075187969924713
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1.3998671490756767
       Euclidische afstand: 1.183159815526067
       Centrumindex 1:
              17 - 54.156682027649765 = -37.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1381.0352523944018
       Euclidische afstand: 37.16228265855586
 ._____
       Centrumindex 2:
              17 - 31.63235294117647 = -14.632352941176471
```

1 - 0.4019607843137254 = 0.5980392156862746

```
Totale euclidische som: 214.4634034986544
      Euclidische afstand: 14.644569078626192
{0: 1.183159815526067, 1: 37.16228265855586, 2: 14.644569078626192}
_____
Afstand van bronindex 782 tot...
       Centrumindex 0:
              29 - 15.992481203007529 = 13.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 169.3397167731356
      Euclidische afstand: 13.013059470129829
 _____
       Centrumindex 1:
              29 - 54.156682027649765 = -25.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 632.9845611501622
      Euclidische afstand: 25.15918442935228
      Centrumindex 2:
              29 - 31.63235294117647 = -2.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 7.090854479046523
      Euclidische afstand: 2.662865839475681
  -----
{0: 13.013059470129829, 1: 25.15918442935228, 2: 2.662865839475681}
_____
Afstand van bronindex 783 tot...
      Centrumindex 0:
              62 - 15.992481203007529 = 46.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 2116.835957374639
      Euclidische afstand: 46.009085595941144
      Centrumindex 1:
              62 - 54.156682027649765 = 7.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 61.64354732527774
      Euclidische afstand: 7.85134047951544
      Centrumindex 2:
              62 - 31.63235294117647 = 30.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 922.3555603613994
      Euclidische afstand: 30.370307215459633
  .-----
```

{0: 46.009085595941144, 1: 7.85134047951544, 2: 30.370307215459633}

```
1
_____
Afstand van bronindex 784 tot...
      Centrumindex 0:
             25 - 15.992481203007529 = 9.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 81.27956639719581
      Euclidische afstand: 9.01551808811872
      Centrumindex 1:
             25 - 54.156682027649765 = -29.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 850.2380173713603
      Euclidische afstand: 29.158841152750917
       -----
      Centrumindex 2:
             25 - 31.63235294117647 = -6.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 44.14967800845829
      Euclidische afstand: 6.644522406347825
_____
{0: 9.01551808811872, 1: 29.158841152750917, 2: 6.644522406347825}
Afstand van bronindex 785 tot...
      Centrumindex 0:
             25 - 15.992481203007529 = 9.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 81.27956639719581
      Euclidische afstand: 9.01551808811872
 _____
      Centrumindex 1:
             25 - 54.156682027649765 = -29.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 850.2380173713603
      Euclidische afstand: 29.158841152750917
      Centrumindex 2:
             25 - 31.63235294117647 = -6.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 44.14967800845829
      Euclidische afstand: 6.644522406347825
  _____
{0: 9.01551808811872, 1: 29.158841152750917, 2: 6.644522406347825}
_____
Afstand van bronindex 786 tot...
      Centrumindex 0:
```

```
18 - 15.992481203007529 = 2.0075187969924713
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 4.414904743060619
       Euclidische afstand: 2.1011674714454864
          -----
       Centrumindex 1:
              18 - 54.156682027649765 = -36.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1307.7218883391024
       Euclidische afstand: 36.16243753315175
          _____
       Centrumindex 2:
              18 - 31.63235294117647 = -13.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 186.19869761630144
       Euclidische afstand: 13.645464360596215
    -----
{0: 2.1011674714454864, 1: 36.16243753315175, 2: 13.645464360596215}
Afstand van bronindex 787 tot...
       Centrumindex 0:
              8 - 15.992481203007529 = -7.992481203007529
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 64.0239272994518
       Euclidische afstand: 8.001495316467528
       Centrumindex 1:
              8 - 54.156682027649765 = -46.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 2130.5652063114526
       Euclidische afstand: 46.15804595421531
       Centrumindex 2:
              8 - 31.63235294117647 = -23.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 558.6496780084583
       Euclidische afstand: 23.63577115324267
{0: 8.001495316467528, 1: 46.15804595421531, 2: 23.63577115324267}
_____
Afstand van bronindex 788 tot...
       Centrumindex 0:
              1 - 15.992481203007529 = -14.992481203007529
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 225.1592656453166
```

Euclidische afstand: 15.00530791571158

```
Centrumindex 1:
              1 - 54.156682027649765 = -53.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 2826.049077279194
       Euclidische afstand: 53.16059703651939
       Centrumindex 2:
              1 - 31.63235294117647 = -30.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 938.6986976163015
       Euclidische afstand: 30.63819018180254
{0: 15.00530791571158, 1: 53.16059703651939, 2: 30.63819018180254}
   _____
Afstand van bronindex 789 tot...
       Centrumindex 0:
              46 - 15.992481203007529 = 30.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 900.5953558708795
       Euclidische afstand: 30.009920957424722
 _____
       Centrumindex 1:
              46 - 54.156682027649765 = -8.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 66.65737221007022
       Euclidische afstand: 8.16439662253557
        ______
       Centrumindex 2:
              46 - 31.63235294117647 = 14.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 206.5908544790465
       Euclidische afstand: 14.373268747193398
{0: 30.009920957424722, 1: 8.16439662253557, 2: 14.373268747193398}
______
Afstand van bronindex 790 tot...
       Centrumindex 0:
              62 - 15.992481203007529 = 46.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 2116.835957374639
       Euclidische afstand: 46.009085595941144
 ._____
       Centrumindex 1:
              62 - 54.156682027649765 = 7.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
```

```
Totale euclidische som: 61.64354732527774
       Euclidische afstand: 7.85134047951544
       Centrumindex 2:
              62 - 31.63235294117647 = 30.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 922.3555603613994
       Euclidische afstand: 30.370307215459633
     -----
{0: 46.009085595941144, 1: 7.85134047951544, 2: 30.370307215459633}
_____
Afstand van bronindex 791 tot...
       Centrumindex 0:
              16 - 15.992481203007529 = 0.007518796992471266
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 0.14422805133133568
       Euclidische afstand: 0.3797736843586397
       Centrumindex 1:
              16 - 54.156682027649765 = -38.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1456.0582938690561
       Euclidische afstand: 38.15833190626991
 ._____
       Centrumindex 2:
              16 - 31.63235294117647 = -15.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 244.53203094963476
       Euclidische afstand: 15.637519974396028
{0: 0.3797736843586397, 1: 38.15833190626991, 2: 15.637519974396028}
_____
Afstand van bronindex 792 tot...
       Centrumindex 0:
              62 - 15.992481203007529 = 46.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 2116.835957374639
       Euclidische afstand: 46.009085595941144
       Centrumindex 1:
              62 - 54.156682027649765 = 7.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 61.64354732527774
       Euclidische afstand: 7.85134047951544
```

Centrumindex 2:

```
62 - 31.63235294117647 = 30.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 922.3555603613994
      Euclidische afstand: 30.370307215459633
  _____
{0: 46.009085595941144, 1: 7.85134047951544, 2: 30.370307215459633}
._____
Afstand van bronindex 793 tot...
      Centrumindex 0:
             62 - 15.992481203007529 = 46.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 2116.835957374639
      Euclidische afstand: 46.009085595941144
       -----
      Centrumindex 1:
             62 - 54.156682027649765 = 7.843317972350235
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 61.64354732527774
      Euclidische afstand: 7.85134047951544
          ._____
      Centrumindex 2:
             62 - 31.63235294117647 = 30.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 922.3555603613994
      Euclidische afstand: 30.370307215459633
 _____
{0: 46.009085595941144, 1: 7.85134047951544, 2: 30.370307215459633}
_____
Afstand van bronindex 794 tot...
      Centrumindex 0:
             25 - 15.992481203007529 = 9.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 81.27956639719581
      Euclidische afstand: 9.01551808811872
      Centrumindex 1:
             25 - 54.156682027649765 = -29.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 850.2380173713603
      Euclidische afstand: 29.158841152750917
       .____
      Centrumindex 2:
             25 - 31.63235294117647 = -6.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 44.14967800845829
```

Euclidische afstand: 6.644522406347825

```
\{0: 9.01551808811872, 1: 29.158841152750917, 2: 6.644522406347825\}
_____
Afstand van bronindex 795 tot...
      Centrumindex 0:
             39 - 15.992481203007529 = 23.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 529.490092712985
      Euclidische afstand: 23.01065172290835
          _____
      Centrumindex 1:
             39 - 54.156682027649765 = -15.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 229.85092059716692
      Euclidische afstand: 15.160835089043312
  _____
      Centrumindex 2:
             39 - 31.63235294117647 = 7.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 54.4437956555171
      Euclidische afstand: 7.378603909651005
  ._____
{0: 23.01065172290835, 1: 15.160835089043312, 2: 7.378603909651005}
Afstand van bronindex 796 tot...
      Centrumindex 0:
             49 - 15.992481203007529 = 33.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1089.881070156594
      Euclidische afstand: 33.01334684876094
      Centrumindex 1:
             49 - 54.156682027649765 = -5.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 27.00760262481679
      Euclidische afstand: 5.1968839341298345
      Centrumindex 2:
             49 - 31.63235294117647 = 17.36764705882353
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 301.9928152633602
      Euclidische afstand: 17.37794047818556
   _____
{0: 33.01334684876094, 1: 5.1968839341298345, 2: 17.37794047818556}
```

```
Afstand van bronindex 797 tot...
       Centrumindex 0:
               31 - 15.992481203007529 = 15.007518796992471
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 225.61039346486487
       Euclidische afstand: 15.020332668248892
       Centrumindex 1:
               31 - 54.156682027649765 = -23.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 536.6481556202083
       Euclidische afstand: 23.165667605752446
       Centrumindex 2:
               31 - 31.63235294117647 = -0.632352941176471
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 0.7575211457131878
       Euclidische afstand: 0.8703569070865055
{0: 15.020332668248892, 1: 23.165667605752446, 2: 0.8703569070865055}
   _____
Afstand van bronindex 798 tot...
       Centrumindex 0:
               30 - 15.992481203007529 = 14.007518796992471
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 196.35475436712053
       Euclidische afstand: 14.012664071015209
        _____
       Centrumindex 1:
               30 - 54.156682027649765 = -24.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 583.6711970948627
       Euclidische afstand: 24.159288008856194
       Centrumindex 2:
               30 - 31.63235294117647 = -1.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.8261485966935807
       Euclidische afstand: 1.681115283582176
{0: 14.012664071015209, 1: 24.159288008856194, 2: 1.681115283582176}
______
Afstand van bronindex 799 tot...
       Centrumindex 0:
               30 - 15.992481203007529 = 14.007518796992471
```

0 - 0.3796992481203007 = -0.3796992481203007

```
Totale euclidische som: 196.35475436712053
       Euclidische afstand: 14.012664071015209
       Centrumindex 1:
              30 - 54.156682027649765 = -24.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 583.6711970948627
       Euclidische afstand: 24.159288008856194
   _____
       Centrumindex 2:
              30 - 31.63235294117647 = -1.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.8261485966935807
       Euclidische afstand: 1.681115283582176
  _____
{0: 14.012664071015209, 1: 24.159288008856194, 2: 1.681115283582176}
_____
Afstand van bronindex 800 tot...
      Centrumindex 0:
              34 - 15.992481203007529 = 18.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 324.41490474306033
       Euclidische afstand: 18.011521444427185
 ._____
       Centrumindex 1:
              34 - 54.156682027649765 = -20.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 406.4177408736646
       Euclidische afstand: 20.159805080249775
 ._____
       Centrumindex 2:
              34 - 31.63235294117647 = 2.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 5.767325067281813
       Euclidische afstand: 2.401525570815729
{0: 18.011521444427185, 1: 20.159805080249775, 2: 2.401525570815729}
Afstand van bronindex 801 tot...
       Centrumindex 0:
              31 - 15.992481203007529 = 15.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 225.61039346486487
       Euclidische afstand: 15.020332668248892
```

Centrumindex 1:

```
31 - 54.156682027649765 = -23.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 536.6481556202083
      Euclidische afstand: 23.165667605752446
         -----
      Centrumindex 2:
             31 - 31.63235294117647 = -0.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 0.7575211457131878
      Euclidische afstand: 0.8703569070865055
 _____
{0: 15.020332668248892, 1: 23.165667605752446, 2: 0.8703569070865055}
______
Afstand van bronindex 802 tot...
      Centrumindex 0:
             11 - 15.992481203007529 = -4.992481203007529
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 25.309641585166023
      Euclidische afstand: 5.030868869804303
         ._____
      Centrumindex 1:
             11 - 54.156682027649765 = -43.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1862.915436726199
      Euclidische afstand: 43.161504106393224
_____
      Centrumindex 2:
             11 - 31.63235294117647 = -20.63235294117647
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 426.05163879277205
      Euclidische afstand: 20.641018356485517
  -----
{0: 5.030868869804303, 1: 43.161504106393224, 2: 20.641018356485517}
  _____
Afstand van bronindex 803 tot...
      Centrumindex 0:
             42 - 15.992481203007529 = 26.00751879699247
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 676.7758069986992
      Euclidische afstand: 26.01491508728597
       .____
      Centrumindex 1:
             42 - 54.156682027649765 = -12.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 148.2011510119135
```

Euclidische afstand: 12.173789509101654

```
Centrumindex 2:
              42 - 31.63235294117647 = 10.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 107.84575643983082
       Euclidische afstand: 10.38488114712108
{0: 26.01491508728597, 1: 12.173789509101654, 2: 10.38488114712108}
Afstand van bronindex 804 tot...
       Centrumindex 0:
              27 - 15.992481203007529 = 11.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 121.5502430889251
       Euclidische afstand: 11.02498267975624
       Centrumindex 1:
              27 - 54.156682027649765 = -27.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 737.9016118414064
       Euclidische afstand: 27.16434449496999
 _____
       Centrumindex 2:
              27 - 31.63235294117647 = -4.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 21.816344675124956
       Euclidische afstand: 4.67079700641389
{0: 11.02498267975624, 1: 27.16434449496999, 2: 4.67079700641389}
_____
Afstand van bronindex 805 tot...
       Centrumindex 0:
              31 - 15.992481203007529 = 15.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 225.36979196110548
       Euclidische afstand: 15.012321338191022
       Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 536.3578330395632
       Euclidische afstand: 23.159400532819564
 ______
       Centrumindex 2:
              31 - 31.63235294117647 = -0.632352941176471
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 0.5614427143406386
      Euclidische afstand: 0.7492948113664198
{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}
-----
Afstand van bronindex 806 tot...
       Centrumindex 0:
              39 - 15.992481203007529 = 23.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 529.490092712985
      Euclidische afstand: 23.01065172290835
 _____
       Centrumindex 1:
              39 - 54.156682027649765 = -15.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 229.85092059716692
      Euclidische afstand: 15.160835089043312
      Centrumindex 2:
              39 - 31.63235294117647 = 7.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 54.4437956555171
      Euclidische afstand: 7.378603909651005
  ._____
{0: 23.01065172290835, 1: 15.160835089043312, 2: 7.378603909651005}
_____
Afstand van bronindex 807 tot...
      Centrumindex 0:
              18 - 15.992481203007529 = 2.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 4.174303239301221
      Euclidische afstand: 2.0431111666527646
      Centrumindex 1:
              18 - 54.156682027649765 = -36.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1307.431565758457
      Euclidische afstand: 36.15842316471305
      Centrumindex 2:
              18 - 31.63235294117647 = -13.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 186.00261918492888
      Euclidische afstand: 13.638277720626196
  ._____
```

{0: 2.0431111666527646, 1: 36.15842316471305, 2: 13.638277720626196}

```
_____
Afstand van bronindex 808 tot...
      Centrumindex 0:
              39 - 15.992481203007529 = 23.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 529.490092712985
      Euclidische afstand: 23.01065172290835
   -----
      Centrumindex 1:
              39 - 54.156682027649765 = -15.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 229.85092059716692
      Euclidische afstand: 15.160835089043312
       _____
      Centrumindex 2:
              39 - 31.63235294117647 = 7.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 54.4437956555171
      Euclidische afstand: 7.378603909651005
{0: 23.01065172290835, 1: 15.160835089043312, 2: 7.378603909651005}
Afstand van bronindex 809 tot...
       Centrumindex 0:
              33 - 15.992481203007529 = 17.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 289.6404686528347
      Euclidische afstand: 17.018826888268027
 _____
       Centrumindex 1:
              33 - 54.156682027649765 = -21.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 448.0214275096093
      Euclidische afstand: 21.166516659800433
      Centrumindex 2:
              33 - 31.63235294117647 = 1.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 2.228109381007304
      Euclidische afstand: 1.492685292018148
  _____
{0: 17.018826888268027, 1: 21.166516659800433, 2: 1.492685292018148}
```

Centrumindex 0:

Afstand van bronindex 810 tot...

\_\_\_\_\_

```
26 - 15.992481203007529 = 10.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 100.29460399118075
       Euclidische afstand: 10.014719366571425
          ._____
       Centrumindex 1:
              26 - 54.156682027649765 = -28.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 792.9246533160608
       Euclidische afstand: 28.15891782927854
          _____
       Centrumindex 2:
              26 - 31.63235294117647 = -5.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 31.88497212610535
       Euclidische afstand: 5.646677972587542
   _____
{0: 10.014719366571425, 1: 28.15891782927854, 2: 5.646677972587542}
2
Afstand van bronindex 811 tot...
       Centrumindex 0:
              39 - 15.992481203007529 = 23.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 529.490092712985
       Euclidische afstand: 23.01065172290835
 _____
       Centrumindex 1:
              39 - 54.156682027649765 = -15.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 229.85092059716692
       Euclidische afstand: 15.160835089043312
       Centrumindex 2:
              39 - 31.63235294117647 = 7.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 54.4437956555171
       Euclidische afstand: 7.378603909651005
{0: 23.01065172290835, 1: 15.160835089043312, 2: 7.378603909651005}
_____
Afstand van bronindex 812 tot...
       Centrumindex 0:
              35 - 15.992481203007529 = 19.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 361.42994233704525
```

Euclidische afstand: 19.01131090527545

```
Centrumindex 1:
              35 - 54.156682027649765 = -19.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 367.1043768183651
       Euclidische afstand: 19.15996807978461
       Centrumindex 2:
              35 - 31.63235294117647 = 3.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 11.50261918492887
       Euclidische afstand: 3.391551147326083
{0: 19.01131090527545, 1: 19.15996807978461, 2: 3.391551147326083}
   -----
Afstand van bronindex 813 tot...
       Centrumindex 0:
              6 - 15.992481203007529 = -9.992481203007529
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 99.9938521114819
       Euclidische afstand: 9.999692600849382
 ._____
       Centrumindex 1:
              6 - 54.156682027649765 = -48.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 2319.1919344220514
       Euclidische afstand: 48.15798931041506
        ______
       Centrumindex 2:
              6 - 31.63235294117647 = -25.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 657.1790897731642
       Euclidische afstand: 25.635504476666032
{0: 9.999692600849382, 1: 48.15798931041506, 2: 25.635504476666032}
_____
Afstand van bronindex 814 tot...
       Centrumindex 0:
              30 - 15.992481203007529 = 14.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 196.35475436712053
       Euclidische afstand: 14.012664071015209
 ______
       Centrumindex 1:
              30 - 54.156682027649765 = -24.156682027649765
```

0 - 0.3548387096774193 = -0.3548387096774193

```
Totale euclidische som: 583.6711970948627
       Euclidische afstand: 24.159288008856194
       Centrumindex 2:
              30 - 31.63235294117647 = -1.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.8261485966935807
       Euclidische afstand: 1.681115283582176
     -----
{0: 14.012664071015209, 1: 24.159288008856194, 2: 1.681115283582176}
_____
Afstand van bronindex 815 tot...
       Centrumindex 0:
              61 - 15.992481203007529 = 45.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 2025.8209197806536
       Euclidische afstand: 45.009120406653736
       Centrumindex 1:
              61 - 54.156682027649765 = 6.843317972350235
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 46.95691138057727
       Euclidische afstand: 6.852511319259332
 ._____
       Centrumindex 2:
              61 - 31.63235294117647 = 29.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 862.6202662437523
       Euclidische afstand: 29.37039778831319
{0: 45.009120406653736, 1: 6.852511319259332, 2: 29.37039778831319}
_____
Afstand van bronindex 816 tot...
       Centrumindex 0:
              23 - 15.992481203007529 = 7.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 49.24949120922594
       Euclidische afstand: 7.017798173873764
       Centrumindex 1:
              23 - 54.156682027649765 = -31.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 970.8647454819594
       Euclidische afstand: 31.158702564162702
```

Centrumindex 2:

```
23 - 31.63235294117647 = -8.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 74.67908977316418
      Euclidische afstand: 8.641706415585071
  _____
{0: 7.017798173873764, 1: 31.158702564162702, 2: 8.641706415585071}
   _____
Afstand van bronindex 817 tot...
      Centrumindex 0:
              31 - 15.992481203007529 = 15.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 225.36979196110548
      Euclidische afstand: 15.012321338191022
       ._____
      Centrumindex 1:
              31 - 54.156682027649765 = -23.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 536.3578330395632
      Euclidische afstand: 23.159400532819564
          ._____
       Centrumindex 2:
              31 - 31.63235294117647 = -0.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 0.5614427143406386
      Euclidische afstand: 0.7492948113664198
{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}
_____
Afstand van bronindex 818 tot...
       Centrumindex 0:
              43 - 15.992481203007529 = 27.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 729.5502430889247
      Euclidische afstand: 27.010187764784693
      Centrumindex 1:
              43 - 54.156682027649765 = -11.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 124.59746437596881
      Euclidische afstand: 11.162323430897745
       .____
      Centrumindex 2:
              43 - 31.63235294117647 = 11.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 129.38497212610534
```

Euclidische afstand: 11.374751519312646

```
{0: 27.010187764784693, 1: 11.162323430897745, 2: 11.374751519312646}
_____
Afstand van bronindex 819 tot...
      Centrumindex 0:
              10 - 15.992481203007529 = -5.992481203007529
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 36.054002487421684
      Euclidische afstand: 6.004498520894288
       Centrumindex 1:
              10 - 54.156682027649765 = -44.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1949.9384782008533
      Euclidische afstand: 44.15810772894207
  _____
      Centrumindex 2:
              10 - 31.63235294117647 = -21.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 468.12026624375244
      Euclidische afstand: 21.63608712877059
  _____
{0: 6.004498520894288, 1: 44.15810772894207, 2: 21.63608712877059}
_____
Afstand van bronindex 820 tot...
      Centrumindex 0:
              52 - 15.992481203007529 = 36.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1296.9261829385487
      Euclidische afstand: 36.01286135450152
      Centrumindex 1:
              52 - 54.156682027649765 = -2.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 5.0675104589182
      Euclidische afstand: 2.2511131599540257
       Centrumindex 2:
              52 - 31.63235294117647 = 20.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 415.19869761630144
       Euclidische afstand: 20.376425045044126
    -----
{0: 36.01286135450152, 1: 2.2511131599540257, 2: 20.376425045044126}
```

```
Afstand van bronindex 821 tot...
       Centrumindex 0:
               27 - 15.992481203007529 = 11.007518796992471
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 121.5502430889251
       Euclidische afstand: 11.02498267975624
       Centrumindex 1:
               27 - 54.156682027649765 = -27.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 737.9016118414064
       Euclidische afstand: 27.16434449496999
       Centrumindex 2:
               27 - 31.63235294117647 = -4.632352941176471
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 21.816344675124956
       Euclidische afstand: 4.67079700641389
{0: 11.02498267975624, 1: 27.16434449496999, 2: 4.67079700641389}
   _____
Afstand van bronindex 822 tot...
       Centrumindex 0:
               38 - 15.992481203007529 = 22.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 484.4750551190001
       Euclidische afstand: 22.010794059256476
        _____
       Centrumindex 1:
               38 - 54.156682027649765 = -16.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 261.1642846524665
       Euclidische afstand: 16.160578103906634
       Centrumindex 2:
               38 - 31.63235294117647 = 6.367647058823529
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 40.70850153787004
       Euclidische afstand: 6.380321429040237
{0: 22.010794059256476, 1: 16.160578103906634, 2: 6.380321429040237}
______
Afstand van bronindex 823 tot...
       Centrumindex 0:
               27 - 15.992481203007529 = 11.007518796992471
```

1 - 0.3796992481203007 = 0.6203007518796992

```
Totale euclidische som: 121.5502430889251
      Euclidische afstand: 11.02498267975624
      Centrumindex 1:
              27 - 54.156682027649765 = -27.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 737.9016118414064
      Euclidische afstand: 27.16434449496999
   _____
      Centrumindex 2:
              27 - 31.63235294117647 = -4.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 21.816344675124956
      Euclidische afstand: 4.67079700641389
  _____
{0: 11.02498267975624, 1: 27.16434449496999, 2: 4.67079700641389}
_____
Afstand van bronindex 824 tot...
      Centrumindex 0:
              2 - 15.992481203007529 = -13.992481203007529
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 195.93370173554214
      Euclidische afstand: 13.997632004576422
 ._____
       Centrumindex 1:
              2 - 54.156682027649765 = -52.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 2720.4453906432495
      Euclidische afstand: 52.1578890547082
 ._____
       Centrumindex 2:
              2 - 31.63235294117647 = -29.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 878.237913302576
      Euclidische afstand: 29.63507910066339
{0: 13.997632004576422, 1: 52.1578890547082, 2: 29.63507910066339}
Afstand van bronindex 825 tot...
      Centrumindex 0:
              61 - 15.992481203007529 = 45.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 2025.8209197806536
      Euclidische afstand: 45.009120406653736
```

Centrumindex 1:

```
61 - 54.156682027649765 = 6.843317972350235
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 46.95691138057727
      Euclidische afstand: 6.852511319259332
         -----
      Centrumindex 2:
             61 - 31.63235294117647 = 29.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 862.6202662437523
      Euclidische afstand: 29.37039778831319
 _____
{0: 45.009120406653736, 1: 6.852511319259332, 2: 29.37039778831319}
______
Afstand van bronindex 826 tot...
      Centrumindex 0:
             61 - 15.992481203007529 = 45.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 2025.8209197806536
      Euclidische afstand: 45.009120406653736
         -----
      Centrumindex 1:
             61 - 54.156682027649765 = 6.843317972350235
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 46.95691138057727
      Euclidische afstand: 6.852511319259332
_____
      Centrumindex 2:
             61 - 31.63235294117647 = 29.36764705882353
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 862.6202662437523
      Euclidische afstand: 29.37039778831319
 _____
\{0: 45.009120406653736, 1: 6.852511319259332, 2: 29.37039778831319\}
 _____
Afstand van bronindex 827 tot...
      Centrumindex 0:
             1 - 15.992481203007529 = -14.992481203007529
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 225.1592656453166
      Euclidische afstand: 15.00530791571158
       ._____
      Centrumindex 1:
             1 - 54.156682027649765 = -53.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 2826.049077279194
```

Euclidische afstand: 53.16059703651939

```
Centrumindex 2:
              1 - 31.63235294117647 = -30.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 938.6986976163015
       Euclidische afstand: 30.63819018180254
{0: 15.00530791571158, 1: 53.16059703651939, 2: 30.63819018180254}
Afstand van bronindex 828 tot...
       Centrumindex 0:
              61 - 15.992481203007529 = 45.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 2026.0615212844132
       Euclidische afstand: 45.011793135626284
       Centrumindex 1:
              61 - 54.156682027649765 = 6.843317972350235
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 47.24723396122243
       Euclidische afstand: 6.87366233977364
 _____
       Centrumindex 2:
              61 - 31.63235294117647 = 29.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 862.8163446751249
       Euclidische afstand: 29.373735626833795
{0: 45.011793135626284, 1: 6.87366233977364, 2: 29.373735626833795}
Afstand van bronindex 829 tot...
       Centrumindex 0:
              62 - 15.992481203007529 = 46.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 2117.0765588783984
       Euclidische afstand: 46.011700238943554
       Centrumindex 1:
              62 - 54.156682027649765 = 7.843317972350235
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 61.9338699059229
       Euclidische afstand: 7.869807488491881
 ______
       Centrumindex 2:
              62 - 31.63235294117647 = 30.36764705882353
```

1 - 0.4019607843137254 = 0.5980392156862746

```
Totale euclidische som: 922.551638792772
      Euclidische afstand: 30.37353517114483
{0: 46.011700238943554, 1: 7.869807488491881, 2: 30.37353517114483}
-----
Afstand van bronindex 830 tot...
       Centrumindex 0:
              15 - 15.992481203007529 = -0.9924812030075287
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1.3697919611057916
      Euclidische afstand: 1.1703811178867298
 _____
       Centrumindex 1:
              15 - 54.156682027649765 = -39.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1533.6619805050009
      Euclidische afstand: 39.16199663583307
      Centrumindex 2:
              15 - 31.63235294117647 = -16.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 276.9928152633603
      Euclidische afstand: 16.643101131200286
  ._____
{0: 1.1703811178867298, 1: 39.16199663583307, 2: 16.643101131200286}
_____
Afstand van bronindex 831 tot...
      Centrumindex 0:
              83 - 15.992481203007529 = 67.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 4490.392348352082
      Euclidische afstand: 67.01038985375389
      Centrumindex 1:
              83 - 54.156682027649765 = 28.843317972350235
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 832.3532247446327
      Euclidische afstand: 28.8505324863274
      Centrumindex 2:
              83 - 31.63235294117647 = 51.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 2638.99281526336
      Euclidische afstand: 51.37112822649859
  .....
{0: 67.01038985375389, 1: 28.8505324863274, 2: 51.37112822649859}
```

```
Afstand van bronindex 832 tot...
       Centrumindex 0:
              13 - 15.992481203007529 = -2.9924812030075287
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 9.099115269376508
       Euclidische afstand: 3.0164739795623148
       Centrumindex 1:
              13 - 54.156682027649765 = -41.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1693.9983860349546
       Euclidische afstand: 41.15821164767676
  ______
       Centrumindex 2:
              13 - 31.63235294117647 = -18.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 347.3261485966936
       Euclidische afstand: 18.636688241119817
{0: 3.0164739795623148, 1: 41.15821164767676, 2: 18.636688241119817}
Afstand van bronindex 833 tot...
       Centrumindex 0:
              23 - 15.992481203007529 = 7.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 49.24949120922594
       Euclidische afstand: 7.017798173873764
 _____
       Centrumindex 1:
              23 - 54.156682027649765 = -31.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 970.8647454819594
       Euclidische afstand: 31.158702564162702
       Centrumindex 2:
              23 - 31.63235294117647 = -8.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 74.67908977316418
       Euclidische afstand: 8.641706415585071
   ______
{0: 7.017798173873764, 1: 31.158702564162702, 2: 8.641706415585071}
_____
Afstand van bronindex 834 tot...
```

Centrumindex 0:

```
18 - 15.992481203007529 = 2.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 4.174303239301221
       Euclidische afstand: 2.0431111666527646
          -----
       Centrumindex 1:
              18 - 54.156682027649765 = -36.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1307.431565758457
       Euclidische afstand: 36.15842316471305
 _____
       Centrumindex 2:
              18 - 31.63235294117647 = -13.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 186.00261918492888
       Euclidische afstand: 13.638277720626196
    -----
{0: 2.0431111666527646, 1: 36.15842316471305, 2: 13.638277720626196}
Afstand van bronindex 835 tot...
       Centrumindex 0:
              39 - 15.992481203007529 = 23.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 529.7306942167444
       Euclidische afstand: 23.01587917540289
 _____
       Centrumindex 1:
              39 - 54.156682027649765 = -15.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 230.1412431778121
       Euclidische afstand: 15.170406823081974
       Centrumindex 2:
              39 - 31.63235294117647 = 7.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 54.63987408688965
       Euclidische afstand: 7.391878928045943
{0: 23.01587917540289, 1: 15.170406823081974, 2: 7.391878928045943}
_____
Afstand van bronindex 836 tot...
       Centrumindex 0:
              21 - 15.992481203007529 = 5.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 25.21941602125605
```

Euclidische afstand: 5.021893668852025

```
Centrumindex 1:
              21 - 54.156682027649765 = -33.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1099.4914735925583
       Euclidische afstand: 33.15858069327694
       Centrumindex 2:
              21 - 31.63235294117647 = -10.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 113.20850153787006
       Euclidische afstand: 10.639948380413792
{0: 5.021893668852025, 1: 33.15858069327694, 2: 10.639948380413792}
   -----
Afstand van bronindex 837 tot...
       Centrumindex 0:
              13 - 15.992481203007529 = -2.9924812030075287
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 9.099115269376508
       Euclidische afstand: 3.0164739795623148
 ______
       Centrumindex 1:
              13 - 54.156682027649765 = -41.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1693.9983860349546
       Euclidische afstand: 41.15821164767676
        ______
       Centrumindex 2:
              13 - 31.63235294117647 = -18.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 347.3261485966936
       Euclidische afstand: 18.636688241119817
{0: 3.0164739795623148, 1: 41.15821164767676, 2: 18.636688241119817}
_____
Afstand van bronindex 838 tot...
       Centrumindex 0:
              32 - 15.992481203007529 = 16.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 256.6254310588498
       Euclidische afstand: 16.01953279777066
 _____
       Centrumindex 1:
              32 - 54.156682027649765 = -22.156682027649765
```

1 - 0.3548387096774193 = 0.6451612903225807

```
Totale euclidische som: 491.3347915649088
      Euclidische afstand: 22.166072984741994
      Centrumindex 2:
              32 - 31.63235294117647 = 0.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 0.49281526336024584
      Euclidische afstand: 0.7020080222905191
     -----
{0: 16.01953279777066, 1: 22.166072984741994, 2: 0.7020080222905191}
_____
Afstand van bronindex 839 tot...
      Centrumindex 0:
              13 - 15.992481203007529 = -2.9924812030075287
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 9.339716773135907
      Euclidische afstand: 3.0560950203054724
      Centrumindex 1:
              13 - 54.156682027649765 = -41.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1694.2887086156
      Euclidische afstand: 41.161738406141204
 ._____
       Centrumindex 2:
              13 - 31.63235294117647 = -18.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 347.52222702806614
       Euclidische afstand: 18.64194804810018
   _____
{0: 3.0560950203054724, 1: 41.161738406141204, 2: 18.64194804810018}
_____
Afstand van bronindex 840 tot...
      Centrumindex 0:
              20 - 15.992481203007529 = 4.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 16.204378427271106
      Euclidische afstand: 4.025466237253904
      Centrumindex 1:
              20 - 54.156682027649765 = -34.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1166.804837647858
      Euclidische afstand: 34.158525109375816
```

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Centrumindex 2:

```
20 - 31.63235294117647 = -11.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 135.473207420223
      Euclidische afstand: 11.639295830084524
  _____
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
  -----
Afstand van bronindex 841 tot...
      Centrumindex 0:
             16 - 15.992481203007529 = 0.007518796992471266
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 0.14422805133133568
      Euclidische afstand: 0.3797736843586397
       -----
      Centrumindex 1:
             16 - 54.156682027649765 = -38.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1456.0582938690561
      Euclidische afstand: 38.15833190626991
          ._____
      Centrumindex 2:
             16 - 31.63235294117647 = -15.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 244.53203094963476
      Euclidische afstand: 15.637519974396028
 ______
{0: 0.3797736843586397, 1: 38.15833190626991, 2: 15.637519974396028}
_____
Afstand van bronindex 842 tot...
      Centrumindex 0:
             30 - 15.992481203007529 = 14.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 196.59535587087993
      Euclidische afstand: 14.021246587621228
      Centrumindex 1:
             30 - 54.156682027649765 = -24.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 583.9615196755078
      Euclidische afstand: 24.16529577049509
       .____
      Centrumindex 2:
             30 - 31.63235294117647 = -1.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 3.02222702806613
```

Euclidische afstand: 1.738455356937914

```
{0: 14.021246587621228, 1: 24.16529577049509, 2: 1.738455356937914}
_____
Afstand van bronindex 843 tot...
      Centrumindex 0:
              34 - 15.992481203007529 = 18.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 324.41490474306033
      Euclidische afstand: 18.011521444427185
          _____
       Centrumindex 1:
              34 - 54.156682027649765 = -20.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 406.4177408736646
      Euclidische afstand: 20.159805080249775
  _____
      Centrumindex 2:
              34 - 31.63235294117647 = 2.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 5.767325067281813
      Euclidische afstand: 2.401525570815729
  _____
{0: 18.011521444427185, 1: 20.159805080249775, 2: 2.401525570815729}
Afstand van bronindex 844 tot...
      Centrumindex 0:
              17 - 15.992481203007529 = 1.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1.1592656453162782
      Euclidische afstand: 1.0766919918510949
      Centrumindex 1:
              17 - 54.156682027649765 = -37.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1380.7449298137565
      Euclidische afstand: 37.158376307553546
       Centrumindex 2:
              17 - 31.63235294117647 = -14.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 214.26732506728183
       Euclidische afstand: 14.637872969365523
{0: 1.0766919918510949, 1: 37.158376307553546, 2: 14.637872969365523}
```

\_\_\_\_\_

```
Afstand van bronindex 845 tot...
       Centrumindex 0:
               42 - 15.992481203007529 = 26.00751879699247
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 676.5352054949398
       Euclidische afstand: 26.010290376982333
       Centrumindex 1:
               42 - 54.156682027649765 = -12.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 147.91082843126833
       Euclidische afstand: 12.161859579491466
       Centrumindex 2:
               42 - 31.63235294117647 = 10.367647058823529
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 107.64967800845828
       Euclidische afstand: 10.375436280391215
{0: 26.010290376982333, 1: 12.161859579491466, 2: 10.375436280391215}
    _____
Afstand van bronindex 846 tot...
       Centrumindex 0:
               15 - 15.992481203007529 = -0.9924812030075287
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1.1291904573463931
       Euclidische afstand: 1.0626337362169493
        ._____
       Centrumindex 1:
               15 - 54.156682027649765 = -39.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1533.3716579243555
       Euclidische afstand: 39.15828977272061
       Centrumindex 2:
               15 - 31.63235294117647 = -16.63235294117647
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 276.79673683198774
       Euclidische afstand: 16.63720940638747
{0: 1.0626337362169493, 1: 39.15828977272061, 2: 16.63720940638747}
______
Afstand van bronindex 847 tot...
       Centrumindex 0:
               35 - 15.992481203007529 = 19.00751879699247
```

0 - 0.3796992481203007 = -0.3796992481203007

```
Totale euclidische som: 361.42994233704525
       Euclidische afstand: 19.01131090527545
       Centrumindex 1:
              35 - 54.156682027649765 = -19.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 367.1043768183651
       Euclidische afstand: 19.15996807978461
  -----
       Centrumindex 2:
              35 - 31.63235294117647 = 3.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 11.50261918492887
       Euclidische afstand: 3.391551147326083
  ______
{0: 19.01131090527545, 1: 19.15996807978461, 2: 3.391551147326083}
_____
Afstand van bronindex 848 tot...
      Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 144.32467917915065
       Euclidische afstand: 12.013520682096097
 ._____
       Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 684.2979252054618
       Euclidische afstand: 26.1590887686376
 ._____
       Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 13.355560361399464
       Euclidische afstand: 3.6545260104970474
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
Afstand van bronindex 849 tot...
       Centrumindex 0:
              15 - 15.992481203007529 = -0.9924812030075287
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1.3697919611057916
       Euclidische afstand: 1.1703811178867298
```

Centrumindex 1:

```
15 - 54.156682027649765 = -39.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1533.6619805050009
      Euclidische afstand: 39.16199663583307
          -----
      Centrumindex 2:
             15 - 31.63235294117647 = -16.63235294117647
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 276.9928152633603
      Euclidische afstand: 16.643101131200286
  _____
{0: 1.1703811178867298, 1: 39.16199663583307, 2: 16.643101131200286}
______
Afstand van bronindex 850 tot...
      Centrumindex 0:
             4 - 15.992481203007529 = -11.992481203007529
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 143.96377692351203
      Euclidische afstand: 11.998490610218939
      Centrumindex 1:
             4 - 54.156682027649765 = -50.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 2515.8186625326507
      Euclidische afstand: 50.15793718378628
      Centrumindex 2:
             4 - 31.63235294117647 = -27.63235294117647
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 763.70850153787
      Euclidische afstand: 27.63527639698706
  -----
{0: 11.998490610218939, 1: 50.15793718378628, 2: 27.63527639698706}
  _____
Afstand van bronindex 851 tot...
      Centrumindex 0:
             74 - 15.992481203007529 = 58.00751879699247
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 3365.016408502458
      Euclidische afstand: 58.00876148050791
       ._____
      Centrumindex 1:
             74 - 54.156682027649765 = 19.843317972350235
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 393.8831786616834
```

Euclidische afstand: 19.84649033611947

```
Centrumindex 2:
              74 - 31.63235294117647 = 42.36764705882353
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 1795.1790897731642
       Euclidische afstand: 42.36955380663294
{0: 58.00876148050791, 1: 19.84649033611947, 2: 42.36955380663294}
Afstand van bronindex 852 tot...
       Centrumindex 0:
              9 - 15.992481203007529 = -6.992481203007529
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 49.03896489343674
       Euclidische afstand: 7.002782653591124
       Centrumindex 1:
              9 - 54.156682027649765 = -45.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 2039.2518422561527
       Euclidische afstand: 45.158076157606104
 _____
       Centrumindex 2:
              9 - 31.63235294117647 = -22.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 512.3849721261054
       Euclidische afstand: 22.635922162043794
{0: 7.002782653591124, 1: 45.158076157606104, 2: 22.635922162043794}
_____
Afstand van bronindex 853 tot...
       Centrumindex 0:
              16 - 15.992481203007529 = 0.007518796992471266
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 0.3848295550907342
       Euclidische afstand: 0.6203463186726703
       Centrumindex 1:
              16 - 54.156682027649765 = -38.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1456.3486164497015
       Euclidische afstand: 38.162135899995185
 ._____
       Centrumindex 2:
              16 - 31.63235294117647 = -15.632352941176471
```

1 - 0.4019607843137254 = 0.5980392156862746

```
Totale euclidische som: 244.72810938100733
      Euclidische afstand: 15.643788204300368
{0: 0.6203463186726703, 1: 38.162135899995185, 2: 15.643788204300368}
_____
Afstand van bronindex 854 tot...
       Centrumindex 0:
              44 - 15.992481203007529 = 28.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 784.5652806829097
      Euclidische afstand: 28.010092479013878
 _____
       Centrumindex 1:
              44 - 54.156682027649765 = -10.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 103.28410032066928
      Euclidische afstand: 10.1628785450122
      Centrumindex 2:
              44 - 31.63235294117647 = 12.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 153.12026624375238
      Euclidische afstand: 12.37417739664954
  ._____
{0: 28.010092479013878, 1: 10.1628785450122, 2: 12.37417739664954}
_____
Afstand van bronindex 855 tot...
      Centrumindex 0:
              18 - 15.992481203007529 = 2.0075187969924713
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 4.414904743060619
      Euclidische afstand: 2.1011674714454864
      Centrumindex 1:
              18 - 54.156682027649765 = -36.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1307.7218883391024
      Euclidische afstand: 36.16243753315175
      Centrumindex 2:
              18 - 31.63235294117647 = -13.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 186.19869761630144
      Euclidische afstand: 13.645464360596215
  ._____
{0: 2.1011674714454864, 1: 36.16243753315175, 2: 13.645464360596215}
```

```
Afstand van bronindex 856 tot...
       Centrumindex 0:
              45 - 15.992481203007529 = 29.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 841.8209197806541
       Euclidische afstand: 29.0141503370451
       Centrumindex 1:
              45 - 54.156682027649765 = -9.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 84.2610588460149
       Euclidische afstand: 9.179382269304122
       ______
       Centrumindex 2:
              45 - 31.63235294117647 = 13.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 179.05163879277202
       Euclidische afstand: 13.381017853391125
{0: 29.0141503370451, 1: 9.179382269304122, 2: 13.381017853391125}
Afstand van bronindex 857 tot...
       Centrumindex 0:
              51 - 15.992481203007529 = 35.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1225.911145344564
       Euclidische afstand: 35.01301394259803
       Centrumindex 1:
              51 - 54.156682027649765 = -3.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 10.38087451421773
       Euclidische afstand: 3.221936454093676
       Centrumindex 2:
              51 - 31.63235294117647 = 19.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 375.4634034986544
       Euclidische afstand: 19.37687806378144
 _____
{0: 35.01301394259803, 1: 3.221936454093676, 2: 19.37687806378144}
_____
```

Afstand van bronindex 858 tot...

Centrumindex 0:

```
24 - 15.992481203007529 = 8.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 64.50513030697027
       Euclidische afstand: 8.031508594714337
          -----
       Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 909.841704007305
       Euclidische afstand: 30.163582413355762
          _____
       Centrumindex 2:
              24 - 31.63235294117647 = -7.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 58.61046232218378
       Euclidische afstand: 7.655747012681635
   _____
{0: 8.031508594714337, 1: 30.163582413355762, 2: 7.655747012681635}
2
Afstand van bronindex 859 tot...
       Centrumindex 0:
              15 - 15.992481203007529 = -0.9924812030075287
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1.1291904573463931
       Euclidische afstand: 1.0626337362169493
 _____
       Centrumindex 1:
              15 - 54.156682027649765 = -39.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1533.3716579243555
       Euclidische afstand: 39.15828977272061
       Centrumindex 2:
              15 - 31.63235294117647 = -16.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 276.79673683198774
       Euclidische afstand: 16.63720940638747
{0: 1.0626337362169493, 1: 39.15828977272061, 2: 16.63720940638747}
_____
Afstand van bronindex 860 tot...
       Centrumindex 0:
              41 - 15.992481203007529 = 25.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 625.5201679009549
```

Euclidische afstand: 25.01040119432223

```
Centrumindex 1:
              41 - 54.156682027649765 = -13.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 173.22419248656786
       Euclidische afstand: 13.161466198207853
       Centrumindex 2:
              41 - 31.63235294117647 = 9.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 87.91438389081122
       Euclidische afstand: 9.376267055220389
{0: 25.01040119432223, 1: 13.161466198207853, 2: 9.376267055220389}
  _____
Afstand van bronindex 861 tot...
       Centrumindex 0:
              21 - 15.992481203007529 = 5.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 25.21941602125605
       Euclidische afstand: 5.021893668852025
 ______
       Centrumindex 1:
              21 - 54.156682027649765 = -33.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1099.4914735925583
       Euclidische afstand: 33.15858069327694
        _____
       Centrumindex 2:
              21 - 31.63235294117647 = -10.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 113.20850153787006
       Euclidische afstand: 10.639948380413792
{0: 5.021893668852025, 1: 33.15858069327694, 2: 10.639948380413792}
_____
Afstand van bronindex 862 tot...
       Centrumindex 0:
              48 - 15.992481203007529 = 32.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 1024.866032562609
       Euclidische afstand: 32.01352889892973
 _____
       Centrumindex 1:
              48 - 54.156682027649765 = -6.156682027649765
```

1 - 0.3548387096774193 = 0.6451612903225807

```
Totale euclidische som: 38.32096668011632
       Euclidische afstand: 6.190393095766724
      Centrumindex 2:
              48 - 31.63235294117647 = 16.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 268.2575211457132
      Euclidische afstand: 16.37856895903037
     -----
{0: 32.01352889892973, 1: 6.190393095766724, 2: 16.37856895903037}
_____
Afstand van bronindex 863 tot...
      Centrumindex 0:
              15 - 15.992481203007529 = -0.9924812030075287
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1.1291904573463931
      Euclidische afstand: 1.0626337362169493
      Centrumindex 1:
              15 - 54.156682027649765 = -39.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1533.3716579243555
      Euclidische afstand: 39.15828977272061
 ._____
       Centrumindex 2:
              15 - 31.63235294117647 = -16.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 276.79673683198774
       Euclidische afstand: 16.63720940638747
   _____
{0: 1.0626337362169493, 1: 39.15828977272061, 2: 16.63720940638747}
_____
Afstand van bronindex 864 tot...
      Centrumindex 0:
              24 - 15.992481203007529 = 8.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 64.26452880321087
      Euclidische afstand: 8.016516001556466
      Centrumindex 1:
              24 - 54.156682027649765 = -30.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 909.5513814266599
      Euclidische afstand: 30.158769560886597
```

Centrumindex 2:

```
24 - 31.63235294117647 = -7.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 58.41438389081123
      Euclidische afstand: 7.642930320944397
  _____
{0: 8.016516001556466, 1: 30.158769560886597, 2: 7.642930320944397}
-------
Afstand van bronindex 865 tot...
      Centrumindex 0:
              42 - 15.992481203007529 = 26.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 676.7758069986992
      Euclidische afstand: 26.01491508728597
       -----
      Centrumindex 1:
              42 - 54.156682027649765 = -12.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 148.2011510119135
      Euclidische afstand: 12.173789509101654
       Centrumindex 2:
              42 - 31.63235294117647 = 10.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 107.84575643983082
      Euclidische afstand: 10.38488114712108
 _____
{0: 26.01491508728597, 1: 12.173789509101654, 2: 10.38488114712108}
_____
Afstand van bronindex 866 tot...
      Centrumindex 0:
              27 - 15.992481203007529 = 11.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 121.5502430889251
      Euclidische afstand: 11.02498267975624
      Centrumindex 1:
              27 - 54.156682027649765 = -27.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 737.9016118414064
      Euclidische afstand: 27.16434449496999
       .____
      Centrumindex 2:
              27 - 31.63235294117647 = -4.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 21.816344675124956
```

Euclidische afstand: 4.67079700641389

```
{0: 11.02498267975624, 1: 27.16434449496999, 2: 4.67079700641389}
_____
Afstand van bronindex 867 tot...
      Centrumindex 0:
             31 - 15.992481203007529 = 15.007518796992471
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 225.36979196110548
      Euclidische afstand: 15.012321338191022
          _____
      Centrumindex 1:
             31 - 54.156682027649765 = -23.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 536.3578330395632
      Euclidische afstand: 23.159400532819564
  _____
      Centrumindex 2:
             31 - 31.63235294117647 = -0.632352941176471
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 0.5614427143406386
      Euclidische afstand: 0.7492948113664198
  _____
{0: 15.012321338191022, 1: 23.159400532819564, 2: 0.7492948113664198}
_____
Afstand van bronindex 868 tot...
      Centrumindex 0:
             15 - 15.992481203007529 = -0.9924812030075287
             0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1.1291904573463931
      Euclidische afstand: 1.0626337362169493
      Centrumindex 1:
             15 - 54.156682027649765 = -39.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1533.3716579243555
      Euclidische afstand: 39.15828977272061
      Centrumindex 2:
             15 - 31.63235294117647 = -16.63235294117647
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 276.79673683198774
      Euclidische afstand: 16.63720940638747
    _____
{0: 1.0626337362169493, 1: 39.15828977272061, 2: 16.63720940638747}
```

\_\_\_\_\_

```
Afstand van bronindex 869 tot...
       Centrumindex 0:
               4 - 15.992481203007529 = -11.992481203007529
               1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 144.20437842727142
       Euclidische afstand: 12.008512748349457
       Centrumindex 1:
               4 - 54.156682027649765 = -50.156682027649765
               1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 2516.1089851132956
       Euclidische afstand: 50.160831184434095
       Centrumindex 2:
               4 - 31.63235294117647 = -27.63235294117647
               1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 763.9045799692426
       Euclidische afstand: 27.63882378049476
{0: 12.008512748349457, 1: 50.160831184434095, 2: 27.63882378049476}
    -----
Afstand van bronindex 870 tot...
       Centrumindex 0:
               26 - 15.992481203007529 = 10.007518796992471
               0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 100.29460399118075
       Euclidische afstand: 10.014719366571425
        ______
       Centrumindex 1:
               26 - 54.156682027649765 = -28.156682027649765
               0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 792.9246533160608
       Euclidische afstand: 28.15891782927854
       Centrumindex 2:
               26 - 31.63235294117647 = -5.632352941176471
               0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 31.88497212610535
       Euclidische afstand: 5.646677972587542
{0: 10.014719366571425, 1: 28.15891782927854, 2: 5.646677972587542}
______
Afstand van bronindex 871 tot...
       Centrumindex 0:
               47 - 15.992481203007529 = 31.00751879699247
```

1 - 0.3796992481203007 = 0.6203007518796992

```
Totale euclidische som: 961.8509949686239
       Euclidische afstand: 31.013722688007384
       Centrumindex 1:
              47 - 54.156682027649765 = -7.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 51.63433073541585
       Euclidische afstand: 7.185703217877555
  -----
       Centrumindex 2:
              47 - 31.63235294117647 = 15.367647058823529
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 236.52222702806614
       Euclidische afstand: 15.379279145267704
  -----
{0: 31.013722688007384, 1: 7.185703217877555, 2: 15.379279145267704}
_____
Afstand van bronindex 872 tot...
      Centrumindex 0:
              33 - 15.992481203007529 = 17.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 289.39986714907536
       Euclidische afstand: 17.011756733185297
 ._____
       Centrumindex 1:
              33 - 54.156682027649765 = -21.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 447.73110492896416
       Euclidische afstand: 21.15965748609755
 ._____
       Centrumindex 2:
              33 - 31.63235294117647 = 1.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.0320309496347546
       Euclidische afstand: 1.4254932303012717
{0: 17.011756733185297, 1: 21.15965748609755, 2: 1.4254932303012717}
Afstand van bronindex 873 tot...
       Centrumindex 0:
              47 - 15.992481203007529 = 31.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 961.6103934648645
       Euclidische afstand: 31.00984349307272
```

406

Centrumindex 1:

```
47 - 54.156682027649765 = -7.156682027649765
             0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 51.34400815477069
      Euclidische afstand: 7.165473337803351
         -----
      Centrumindex 2:
             47 - 31.63235294117647 = 15.367647058823529
             0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 236.32614859669357
      Euclidische afstand: 15.372903063400015
 _____
{0: 31.00984349307272, 1: 7.165473337803351, 2: 15.372903063400015}
______
Afstand van bronindex 874 tot...
      Centrumindex 0:
             28 - 15.992481203007529 = 12.007518796992471
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 144.56528068291004
      Euclidische afstand: 12.023530292011163
         ._____
      Centrumindex 1:
             28 - 54.156682027649765 = -26.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 684.5882477861069
      Euclidische afstand: 26.164637352466915
 _____
      Centrumindex 2:
             28 - 31.63235294117647 = -3.632352941176471
             1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 13.551638792772014
      Euclidische afstand: 3.6812550567397544
 _____
{0: 12.023530292011163, 1: 26.164637352466915, 2: 3.6812550567397544}
  -----
Afstand van bronindex 875 tot...
      Centrumindex 0:
             15 - 15.992481203007529 = -0.9924812030075287
             1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1.3697919611057916
      Euclidische afstand: 1.1703811178867298
       ._____
      Centrumindex 1:
             15 - 54.156682027649765 = -39.156682027649765
             1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 1533.6619805050009
```

Euclidische afstand: 39.16199663583307

```
Centrumindex 2:
              15 - 31.63235294117647 = -16.63235294117647
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 276.9928152633603
       Euclidische afstand: 16.643101131200286
{0: 1.1703811178867298, 1: 39.16199663583307, 2: 16.643101131200286}
Afstand van bronindex 876 tot...
       Centrumindex 0:
              20 - 15.992481203007529 = 4.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 16.204378427271106
       Euclidische afstand: 4.025466237253904
       Centrumindex 1:
              20 - 54.156682027649765 = -34.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1166.804837647858
       Euclidische afstand: 34.158525109375816
 _____
       Centrumindex 2:
              20 - 31.63235294117647 = -11.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 135.473207420223
       Euclidische afstand: 11.639295830084524
{0: 4.025466237253904, 1: 34.158525109375816, 2: 11.639295830084524}
_____
Afstand van bronindex 877 tot...
       Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 9.189340833286163
       Euclidische afstand: 3.031392556777522
       Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1236.1182017031574
       Euclidische afstand: 35.15847268729342
 _____
       Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
```

0 - 0.4019607843137254 = -0.4019607843137254

```
Totale euclidische som: 159.73791330257595
      Euclidische afstand: 12.638746508359757
{0: 3.031392556777522, 1: 35.15847268729342, 2: 12.638746508359757}
_____
Afstand van bronindex 878 tot...
      Centrumindex 0:
              15 - 15.992481203007529 = -0.9924812030075287
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 1.1291904573463931
      Euclidische afstand: 1.0626337362169493
 _____
      Centrumindex 1:
              15 - 54.156682027649765 = -39.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 1533.3716579243555
      Euclidische afstand: 39.15828977272061
      Centrumindex 2:
              15 - 31.63235294117647 = -16.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
      Totale euclidische som: 276.79673683198774
      Euclidische afstand: 16.63720940638747
  .....
{0: 1.0626337362169493, 1: 39.15828977272061, 2: 16.63720940638747}
_____
Afstand van bronindex 879 tot...
      Centrumindex 0:
              56 - 15.992481203007529 = 40.00751879699247
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 1600.9863333144885
      Euclidische afstand: 40.01232726691224
      Centrumindex 1:
              56 - 54.156682027649765 = 1.8433179723502349
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 3.8140542377200783
      Euclidische afstand: 1.95296037791863
      Centrumindex 2:
              56 - 31.63235294117647 = 24.36764705882353
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 594.1398740868897
      Euclidische afstand: 24.37498459664928
```

{0: 40.01232726691224, 1: 1.95296037791863, 2: 24.37498459664928}

```
_____
Afstand van bronindex 880 tot...
       Centrumindex 0:
              25 - 15.992481203007529 = 9.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 81.52016790095522
       Euclidische afstand: 9.028851970264837
   -----
       Centrumindex 1:
              25 - 54.156682027649765 = -29.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 850.5283399520055
       Euclidische afstand: 29.1638190220692
       ______
       Centrumindex 2:
              25 - 31.63235294117647 = -6.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 44.345756439830836
       Euclidische afstand: 6.659260952976001
{0: 9.028851970264837, 1: 29.1638190220692, 2: 6.659260952976001}
Afstand van bronindex 881 tot...
       Centrumindex 0:
              33 - 15.992481203007529 = 17.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 289.39986714907536
       Euclidische afstand: 17.011756733185297
       Centrumindex 1:
              33 - 54.156682027649765 = -21.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 447.73110492896416
       Euclidische afstand: 21.15965748609755
       Centrumindex 2:
              33 - 31.63235294117647 = 1.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 2.0320309496347546
       Euclidische afstand: 1.4254932303012717
  _____
{0: 17.011756733185297, 1: 21.15965748609755, 2: 1.4254932303012717}
_____
Afstand van bronindex 882 tot...
      Centrumindex 0:
```

```
22 - 15.992481203007529 = 6.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 36.234453615240994
       Euclidische afstand: 6.0195060939616125
          -----
       Centrumindex 1:
              22 - 54.156682027649765 = -32.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1034.178109537259
       Euclidische afstand: 32.15863973393867
          _____
       Centrumindex 2:
              22 - 31.63235294117647 = -9.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 92.94379565551712
       Euclidische afstand: 9.640736261070371
   _____
{0: 6.0195060939616125, 1: 32.15863973393867, 2: 9.640736261070371}
Afstand van bronindex 883 tot...
       Centrumindex 0:
              28 - 15.992481203007529 = 12.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 144.32467917915065
       Euclidische afstand: 12.013520682096097
 _____
       Centrumindex 1:
              28 - 54.156682027649765 = -26.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 684.2979252054618
       Euclidische afstand: 26.1590887686376
       Centrumindex 2:
              28 - 31.63235294117647 = -3.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 13.355560361399464
       Euclidische afstand: 3.6545260104970474
{0: 12.013520682096097, 1: 26.1590887686376, 2: 3.6545260104970474}
_____
Afstand van bronindex 884 tot...
       Centrumindex 0:
              25 - 15.992481203007529 = 9.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 81.27956639719581
```

Euclidische afstand: 9.01551808811872

```
Centrumindex 1:
              25 - 54.156682027649765 = -29.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 850.2380173713603
       Euclidische afstand: 29.158841152750917
       Centrumindex 2:
              25 - 31.63235294117647 = -6.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 44.14967800845829
       Euclidische afstand: 6.644522406347825
{0: 9.01551808811872, 1: 29.158841152750917, 2: 6.644522406347825}
   -----
Afstand van bronindex 885 tot...
       Centrumindex 0:
              39 - 15.992481203007529 = 23.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 529.490092712985
       Euclidische afstand: 23.01065172290835
 ______
       Centrumindex 1:
              39 - 54.156682027649765 = -15.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 229.85092059716692
       Euclidische afstand: 15.160835089043312
        ______
       Centrumindex 2:
              39 - 31.63235294117647 = 7.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 54.4437956555171
       Euclidische afstand: 7.378603909651005
{0: 23.01065172290835, 1: 15.160835089043312, 2: 7.378603909651005}
______
Afstand van bronindex 886 tot...
       Centrumindex 0:
              27 - 15.992481203007529 = 11.007518796992471
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 121.30964158516569
       Euclidische afstand: 11.014065624698524
 ._____
       Centrumindex 1:
              27 - 54.156682027649765 = -27.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
```

```
Totale euclidische som: 737.6112892607613
       Euclidische afstand: 27.159000152081468
       Centrumindex 2:
              27 - 31.63235294117647 = -4.632352941176471
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 21.620266243752408
       Euclidische afstand: 4.649759804952553
      ._____
{0: 11.014065624698524, 1: 27.159000152081468, 2: 4.649759804952553}
_____
Afstand van bronindex 887 tot...
       Centrumindex 0:
              19 - 15.992481203007529 = 3.0075187969924713
              1 - 0.3796992481203007 = 0.6203007518796992
       Totale euclidische som: 9.429942337045562
       Euclidische afstand: 3.0708211177217017
       Centrumindex 1:
              19 - 54.156682027649765 = -35.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
       Totale euclidische som: 1236.4085242838028
       Euclidische afstand: 35.16260121611885
 ._____
       Centrumindex 2:
              19 - 31.63235294117647 = -12.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
       Totale euclidische som: 159.93399173394852
       Euclidische afstand: 12.64650116569593
{0: 3.0708211177217017, 1: 35.16260121611885, 2: 12.64650116569593}
_____
Afstand van bronindex 888 tot...
       Centrumindex 0:
              15 - 15.992481203007529 = -0.9924812030075287
              0 - 0.3796992481203007 = -0.3796992481203007
       Totale euclidische som: 1.1291904573463931
       Euclidische afstand: 1.0626337362169493
       Centrumindex 1:
              15 - 54.156682027649765 = -39.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
       Totale euclidische som: 1533.3716579243555
       Euclidische afstand: 39.15828977272061
```

413

Centrumindex 2:

```
15 - 31.63235294117647 = -16.63235294117647
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 276.79673683198774
      Euclidische afstand: 16.63720940638747
  _____
{0: 1.0626337362169493, 1: 39.15828977272061, 2: 16.63720940638747}
  -----
Afstand van bronindex 889 tot...
      Centrumindex 0:
              26 - 15.992481203007529 = 10.007518796992471
              1 - 0.3796992481203007 = 0.6203007518796992
      Totale euclidische som: 100.53520549494016
      Euclidische afstand: 10.026724564629276
       -----
      Centrumindex 1:
              26 - 54.156682027649765 = -28.156682027649765
              1 - 0.3548387096774193 = 0.6451612903225807
      Totale euclidische som: 793.2149758967059
      Euclidische afstand: 28.164072430966122
          ._____
       Centrumindex 2:
              26 - 31.63235294117647 = -5.632352941176471
              1 - 0.4019607843137254 = 0.5980392156862746
      Totale euclidische som: 32.081050557477894
      Euclidische afstand: 5.66401364382872
{0: 10.026724564629276, 1: 28.164072430966122, 2: 5.66401364382872}
_____
Afstand van bronindex 890 tot...
      Centrumindex 0:
              32 - 15.992481203007529 = 16.00751879699247
              0 - 0.3796992481203007 = -0.3796992481203007
      Totale euclidische som: 256.38482955509045
      Euclidische afstand: 16.01202140752661
      Centrumindex 1:
              32 - 54.156682027649765 = -22.156682027649765
              0 - 0.3548387096774193 = -0.3548387096774193
      Totale euclidische som: 491.0444689842637
      Euclidische afstand: 22.15952321202475
       .____
      Centrumindex 2:
              32 - 31.63235294117647 = 0.367647058823529
              0 - 0.4019607843137254 = -0.4019607843137254
       Totale euclidische som: 0.2967368319876966
```

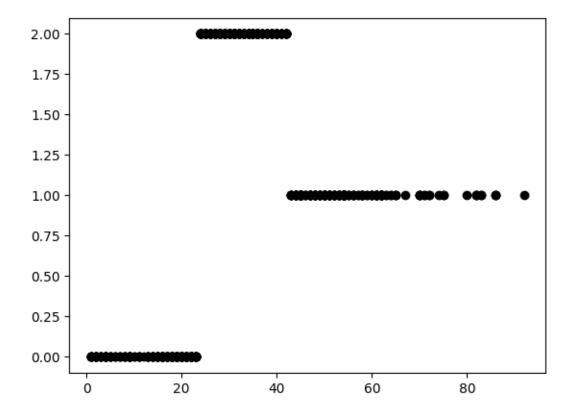
Euclidische afstand: 0.5447355615229252

-----

```
{0: 16.01202140752661, 1: 22.15952321202475, 2: 0.5447355615229252}
```

[]:		Age	Survived	Centrum
	0	22	0	0.0
	1	38	1	2.0
	2	26	1	2.0
	3	35	1	2.0
	4	35	0	2.0
		•••	•••	•••
	886	27	0	2.0
	887	19	1	0.0
	888	15	0	0.0
	889	26	1	2.0
	890	32	0	2.0

[891 rows x 3 columns]



```
[]: df_2d.groupby('Centrum', as_index = False)['Centrum'].count()
```

[]: Centrum 0 266 1 217 2 408

# 1.5 Clusteringmodel bouwen met meer dan 2 dimensies (alle kolommen uit de dataset)

### 1.5.1 Centra berekenen

```
[]: kmeans = KMeans(n_clusters = 6, random_state = 42)
prediction_results = kmeans.fit_predict(df)
prediction_results
```

```
[]: array([0, 1, 2, 2, 2, 2, 5, 4, 2, 0, 4, 5, 0, 1, 0, 5, 4, 2, 2, 2, 2, 2,
           0, 2, 2, 2, 2, 0, 4, 0, 1, 2, 5, 2, 0, 2, 4, 4, 0, 1, 1, 4, 1, 1,
           2, 0, 0, 2, 2, 0, 0, 2, 2, 0, 1, 1, 3, 2, 0, 2, 0, 2, 0, 2, 0, 0,
           0, 0, 2, 0, 1, 2, 5, 0, 3, 0, 2, 2, 2, 0, 0, 2, 2, 2, 0, 0, 1, 0,
           1, 0, 0, 0, 0, 0, 3, 2, 0, 4, 0, 3, 2, 2, 5, 4, 2, 0, 2, 1, 2, 0,
           1, 2, 0, 0, 0, 2, 0, 0, 2, 0, 0, 0, 0, 0, 2, 4, 2, 1, 5, 0, 5, 1,
           0, 5, 0, 2, 0, 0, 1, 1, 2, 0, 4, 4, 0, 1, 0, 2, 5, 4, 4, 0, 5, 0,
           0, 5, 2, 2, 0, 0, 4, 4, 4, 0, 0, 1, 1, 2, 2, 0, 0, 4, 1, 5, 0, 1,
           0, 0, 2, 0, 2, 1, 0, 4, 2, 2, 0, 1, 0, 2, 0, 2, 1, 2, 2, 1, 2,
           0, 2, 5, 1, 1, 0, 0, 0, 0, 2, 2, 2, 5, 4, 0, 2, 1, 4, 0, 2, 2, 2,
           2, 0, 2, 1, 0, 0, 2, 5, 2, 2, 5, 2, 1, 2, 2, 2, 2, 5, 2, 4, 5, 1,
           2, 2, 0, 0, 5, 2, 2, 0, 1, 2, 2, 5, 1, 2, 4, 2, 5, 2, 0, 0, 2, 2,
           2, 0, 1, 0, 2, 0, 2, 0, 0, 2, 0, 4, 5, 5, 5, 5, 0, 5, 5, 3, 3, 0,
           2, 2, 0, 0, 2, 2, 1, 2, 0, 5, 2, 1, 0, 2, 2, 0, 3, 2, 5, 2, 2, 0,
           3, 1, 1, 0, 5, 5, 2, 1, 1, 1, 4, 0, 2, 0, 2, 0, 1, 5, 4, 1, 0, 5,
           0, 0, 5, 2, 0, 1, 5, 5, 1, 2, 1, 2, 5, 2, 5, 5, 5, 0, 0, 0, 0, 0,
           4, 5, 0, 2, 0, 0, 1, 4, 2, 2, 5, 0, 4, 2, 5, 0, 2, 0, 2, 0, 0, 0,
           2, 1, 0, 2, 1, 2, 0, 2, 0, 2, 5, 4, 0, 5, 5, 5, 2, 5, 1, 5, 2, 0,
           2, 4, 5, 0, 2, 2, 0, 5, 2, 0, 5, 2, 5, 1, 0, 5, 0, 0, 0, 5, 2,
           1, 0, 0, 2, 5, 4, 0, 2, 4, 5, 2, 5, 2, 1, 5, 2, 5, 5, 5, 5, 1,
           1, 1, 5, 1, 5, 5, 5, 3, 2, 1, 2, 0, 0, 2, 2, 2, 0, 4, 4, 2, 5, 5,
           0, 2, 2, 5, 2, 4, 2, 0, 5, 3, 0, 2, 5, 2, 0, 0, 0, 0, 2, 2, 0, 0,
           2, 2, 2, 2, 2, 2, 5, 0, 1, 2, 2, 2, 2, 2, 0, 2, 1, 2, 1, 5, 1,
           1, 0, 4, 1, 0, 1, 2, 4, 1, 2, 1, 0, 2, 4, 4, 2, 5, 5, 0, 1, 2, 4,
           0, 2, 1, 0, 0, 5, 1, 1, 1, 2, 1, 1, 2, 1, 1, 0, 0, 2, 1, 2, 5, 5,
           2, 1, 0, 0, 2, 1, 1, 2, 0, 1, 5, 2, 1, 0, 1, 5, 0, 1, 2, 5, 1, 1,
           2, 2, 1, 1, 1, 1, 0, 1, 1, 1, 2, 2, 2, 2, 0, 1, 1, 1, 1, 1, 2,
           2, 2, 4, 2, 2, 1, 0, 0, 0, 5, 5, 0, 2, 1, 3, 5, 2, 1, 4, 2, 2, 2,
           1, 1, 0, 0, 4, 1, 3, 1, 0, 5, 0, 0, 0, 0, 0, 0, 0, 0, 0, 2, 0, 5,
           5, 1, 1, 2, 0, 2, 0, 0, 1, 0, 1, 2, 3, 2, 0, 0, 0, 0, 1, 2, 2, 2,
           0, 0, 5, 0, 0, 0, 0, 0, 2, 4, 2, 0, 5, 5, 1, 2, 1, 1, 0, 2, 0, 0,
```

```
2, 1, 1, 1, 0, 2, 0, 2, 1, 2, 5, 0, 1, 2, 2, 2, 4, 0, 2, 5, 2, 0, 2, 2, 0, 0, 2, 4, 2, 0, 0, 2, 1, 2, 3, 3, 3, 2, 0, 0, 2, 3, 0, 2, 0, 2, 4, 4, 2, 0, 1, 3, 2, 0, 2, 2, 3, 1, 0, 2, 0, 5, 3, 2, 5, 2, 0, 1, 5, 5, 5, 0, 5, 4, 5, 1, 0, 0, 2, 5, 0, 0, 0, 4, 4, 1, 5, 0, 5, 5, 0, 1, 1, 2, 2, 2, 2, 2, 4, 1, 2, 2, 1, 0, 1, 2, 2, 1, 2, 4, 2, 5, 0, 2, 1, 4, 5, 2, 1, 2, 4, 5, 5, 4, 5, 5, 0, 3, 0, 0, 0, 1, 0, 0, 2, 0, 0, 0, 2, 2, 0, 1, 0, 2, 2, 0, 4, 3, 4, 0, 1, 0, 1, 5, 0, 0, 1, 0, 1, 0, 1, 2, 2, 0, 0, 2, 2])
```

```
[]: df['Centrum'] = prediction_results df
```

[]:	Pclass_1	Pclass_2	Pclass_3	Sex_female	${\tt Sex\_male}$	Age	Survived	\
0	False	False	True	False	True	22	0	
1	True	False	False	True	False	38	1	
2	False	False	True	True	False	26	1	
3	True	False	False	True	False	35	1	
4	False	False	True	False	True	35	0	
	•••	•••	•••					
886	False	True	False	False	True	27	0	
887	True	False	False	True	False	19	1	
888	False	False	True	True	False	15	0	
889	True	False	False	False	True	26	1	
890	False	False	True	False	True	32	0	

	Centrum
0	0
1	1
2	2
3	2
4	2
	•••
886	2
887	0
888	0
889	2
890	2

[891 rows x 8 columns]

## 1.5.2 De juiste centra toewijzen aan rijen uit de dataset

```
[]: df.groupby('Centrum', as_index = False)['Centrum'].count()
```

```
[]: Centrum
0 265
```

```
1 145
2 285
3 22
4 61
5 113
```

### 2 De Sales Branches clusteren

Om de segmenten van de verkoopafdelingen te bepalen, gaan we de volgende stappen doorlopen: - We kunnen de segmenten op basis van producten categorieën en het verkoop van die producten, bepalen welke segmenten we nodig zullen hebben voor onze verkoopafdeling. - We pakken daarbij ook de branches van de retailers erbij, zodat we de segmenten van de verkoopafdelingen kunnen bepalen. - Daarna zullen we gebaseerd op de omzet en kosten van de verkoopafdelingen, de segmenten bepalen. - Waar we dan de gemixte data in een clustering model zullen stoppen en de segmenten bepalen.

Eerst gaan we de data inladen.

```
[]: # Verbinding maken met de databases
    conn_sales = sqlite3.connect('data/go_sales.sqlite')
    conn_crm = sqlite3.connect('data/go_crm.sqlite')
    conn_staff = sqlite3.connect('data/go_staff.sqlite')

# Gegevens ophalen uit de databases (Helaas verouderd)
sales_branch = pd.read_sql_query("SELECT * FROM sales_branch", conn_staff)
# country1 = pd.read_sql_query("SELECT * FROM country", conn_sales)
# country2 = pd.read_sql_query("SELECT * FROM country", conn_crm)
# territory = pd.read_sql_query("SELECT * FROM sales_territory", conn_crm)

# orders_header = pd.read_sql_query("SELECT * FROM order_header;", conn_sales)
# order_details = pd.read_sql_query("SELECT * FROM order_details;", conn_sales)
```

Hier gaan we de data van de great outdoors inlezen en bepaalde data dropen.

```
[]: # (Helaas Verouderd)
    # country = country1[['CURRENCY_NAME', 'LANGUAGE']]
    # country = pd.concat([country2, country], axis = 1)
    # sales_branch.drop('TRIAL633', axis=1, inplace=True)
    # country.drop('TRIAL219', axis=1, inplace=True)
    # territory.drop('TRIAL222', axis=1, inplace=True)
    # orders_header.drop('TRIAL885', axis=1, inplace=True)
    # order_details.drop('TRIAL879', axis=1, inplace=True)
    sales_branch.drop('TRIAL633', axis=1, inplace=True)
    sales_branch = sales_branch.drop(["ADDRESS1", "ADDRESS2", "POSTAL_ZONE"], \_ \_ \axis=1)
    sales_branch
```

[]:	SALES_BRANCH_CODE	CITY	REGION	COUNTRY_CODE
0	13	Hamburg	None	2
1	14	München	None	2
2	15	Kista	None	10
3	17	Calgary	Alberta	4
4	18	Toronto	Ontario	4
5	19	Boston	Massachusetts	3
6	20	Seattle	Washington	3
7	21	Los Angeles	California	3
8	22	Miami	Florida	3
9	23	Lyon	None	1
10	24	Distrito Federal	México	20
11	25	Tokyo	Tokyo	11
12	26	Osaka City	Osaka	11
13	28	Melbourne	VIC	16
14	29	Bilbao	Vizcaya	19
15	30	São Paulo	SP	21
16	31	Kuopio	None	22
17	32	Seoul	None	13
18	33	San Chung	Taipei	12
19	34	Shanghai	None	14
20	35	London	None	9
21	36	Birmingham	West Midlands	9
22	37	Zürich	None	8
23	38	Heverlee	None	17
24	39	Wien	None	5
25		Paris	None	1
26	7	Milano	None	6
27	9	Amsterdam	Noord-Holland	7

We zorgen er nu voor dat we de sales\_branches city en region gaan omzetten in dummies.

```
[ ]: table = sales_branch[['CITY', 'REGION']]
df = pd.get_dummies(table) # Dummy encoding
```

# 2.1 Clusteringmodel bouwen met 2 dimensies

Eerst wordt een 2D-dataset gemaakt met de locaties van de verkoopfilialen.

Waar we ook dummy encoding toepassen.

```
[ ]: table = pd.concat([sales_branch, df], axis=1)
table
```

[]:	SALES_BRANCH_CODE	CITY	REGION	COUNTRY_CODE	\
0	13	Hamburg	None	2	
1	14	München	None	2	
2	15	Kista	None	10	
3	17	Calgary	Alberta	4	

4	18	Toronto	Ontario		4	
5	19	Boston	Massachusetts		3	
6	20	Seattle	Washington		3	
7	21	Los Angeles	California		3	
8	22	Miami	Florida		3	
9	23	Lyon	None		1	
10	24	Distrito Federal	México		20	
1	1 25	Tokyo	Tokyo		11	
1:	2 26	Osaka City	Osaka		11	
1	3 28	Melbourne	VIC		16	
14	4 29	Bilbao	Vizcaya		19	
1	5 30	São Paulo	SP		21	
1	31	Kuopio	None		22	
1	7 32	Seoul	None		13	
18	33	San Chung	Taipei		12	
19	9 34		None		14	
2	35	London	None		9	
2	1 36	Birmingham	West Midlands		9	
2	2 37	Zürich	None		8	
2	3 38	Heverlee	None		17	
2	4 39	Wien	None		5	
2	5 6	Paris	None		1	
2	6 7	Milano	None		6	
2	7 9	Amsterdam	Noord-Holland		7	
	CITY_Amsterdam	CITY_Bilbao CITY_B	irmingham CITY	_Boston	CITY_Calgary	\
0	False	False	False	False	False	
1	False	False	False	False	False	
2	False	False	False	False	False	
3	False	False	False	False	True	
4	False	False	False	False	False	
5	False	False	False	True	False	
6	False	False	False	False	False	
7	False	False	False	False	False	
8	False	False	False	False	False	
9	False					
		False	False	False	False	
1	) False	False	False	False	False	
10 1	) False 1 False	False False	False False	False False	False False	
10 13 13	False False False	False False False	False False False	False False False	False False False	
10 10 10 10	False False False False False	False False False False	False False False False	False False False False	False False False False	
10 13 13 14	False False False False False False	False False False False True	False False False False False	False False False False False	False False False False False	
10 11 11 14 14	False False False False False False False False	False False False False True False	False False False False False	False False False False False	False False False False False	
10 11 11 12 14 14 10	False	False False False False True False False	False False False False False False False	False False False False False False False	False False False False False False	
10 13 13 14 10 10	False	False False False False True False False False	False False False False False False False False	False False False False False False False False	False False False False False False False	
10 12 13 14 14 10 13	False	False False False False True False False False False	False False False False False False False False False	False False False False False False False False False	False False False False False False False	
10 13 13 14 10 10	False	False False False False True False False False	False False False False False False False False	False False False False False False False False	False False False False False False False	

False

False

False

20

False

False

21	False	Fal	se	True	Fa	alse	False
22	False	Fal		False		alse	False
23	False	Fal		False		alse	False
24	False	Fal		False		alse	False
25	False	Fal		False		alse	False
26	False	Fal		False		alse	False
27	True	Fal		False		alse	False
							- 4-50
	CITY_Distrito Federal	•••	REGION_Noord-	-Holland	REGION	N_Ontario `	\
0	False			False		False	
1	False			False		False	
2	False			False		False	
3	False	•••		False		False	
4	False	•••		False		True	
5	False	•••		False		False	
6	False	•••		False		False	
7	False	•••		False		False	
8	False	•••		False		False	
9	False	•••		False		False	
10	True	•••		False		False	
11	False	•••		False		False	
12	False			False		False	
13	False	•••		False		False	
14	False	•••		False		False	
15	False			False		False	
16	False			False		False	
17	False			False		False	
18	False			False		False	
19	False	•••		False		False	
20	False			False		False	
21	False			False		False	
22	False			False		False	
23	False			False		False	
24	False	•••		False		False	
25	False			False		False	
26	False	•••		False		False	
27	False	•••		True		False	
			REGION_Taipei		•	REGION_VIC	\
0	False Fals		False		False	False	
1	False Fals		False		False	False	
2	False Fals		False		False	False	
3	False Fals		False		False	False	
4	False Fals		False		False	False	
5	False Fals		False		False	False	
6	False Fals		False		False	False	
7	False Fals	se	False		False	False	

8	False	False	False	False	False
9	False	False	False	False	False
10	False	False	False	False	False
11	False	False	False	True	False
12	True	False	False	False	False
13	False	False	False	False	True
14	False	False	False	False	False
15	False	True	False	False	False
16	False	False	False	False	False
17	False	False	False	False	False
18	False	False	True	False	False
19	False	False	False	False	False
20	False	False	False	False	False
21	False	False	False	False	False
22	False	False	False	False	False
23	False	False	False	False	False
24	False	False	False	False	False
25	False	False	False	False	False
26	False	False	False	False	False
27	False	False	False	False	False

	REGION_Vizcaya	REGION_Washington	REGION_West Midlands
0	False	False	False
1	False	False	False
2	False	False	False
3	False	False	False
4	False	False	False
5	False	False	False
6	False	True	False
7	False	False	False
8	False	False	False
9	False	False	False
10	False	False	False
11	False	False	False
12	False	False	False
13	False	False	False
14	True	False	False
15	False	False	False
16	False	False	False
17	False	False	False
18	False	False	False
19	False	False	False
20	False	False	False
21	False	False	True
22	False	False	False
23	False	False	False
24	False	False	False

25	False	False	False
26	False	False	False
27	False	False	False

[28 rows x 47 columns]

3 1.000000e+00

Een k-means clusteringmodel wordt geïnstantieerd met het gewenste aantal clusters (3 of 4 in het eerste geval, met een willenkeurigheid van 42) en toegepast op de 2D-dataset.

```
[]: # Train het clustermodel
     kmeans = KMeans(n_clusters=5, random_state=42)
     prediction_results = kmeans.fit_predict(df)
     prediction_results
     kmeans_centra = pd.DataFrame(kmeans.cluster_centers_)
     kmeans centra
     for i in range(len(kmeans centra.columns)):
         kmeans_centra = kmeans_centra.rename(columns = {i : f'{df.columns[i]}'})
     kmeans_centra
[]:
        CITY_Amsterdam
                        CITY_Bilbao
                                      CITY_Birmingham CITY_Boston
                                                                     CITY_Calgary
          0.000000e+00
                            0.000000
                                             0.000000
                                                           0.000000
                                                                         0.000000
     0
     1
          1.387779e-17
                            0.041667
                                             0.041667
                                                           0.041667
                                                                         0.041667
     2
          0.000000e+00
                           0.000000
                                             0.000000
                                                           0.000000
                                                                         0.000000
     3
          0.000000e+00
                            0.000000
                                             0.000000
                                                           0.000000
                                                                         0.000000
     4
          1.000000e+00
                           0.000000
                                             0.000000
                                                           0.000000
                                                                         0.000000
        CITY Distrito Federal
                                CITY_Hamburg
                                              CITY_Heverlee
                                                              CITY_Kista
     0
                 1.000000e+00
                                    0.000000
                                                   0.000000
                                                                0.00000
                 1.387779e-17
     1
                                    0.041667
                                                   0.041667
                                                                0.041667
     2
                 0.000000e+00
                                    0.000000
                                                   0.000000
                                                                0.000000
     3
                 0.000000e+00
                                    0.000000
                                                   0.000000
                                                                0.000000
     4
                 0.000000e+00
                                    0.000000
                                                   0.000000
                                                                0.000000
        CITY_Kuopio
                        REGION_Noord-Holland
                                               REGION_Ontario
                                                                REGION_Osaka
     0
           0.000000
                                 0.000000e+00
                                                  0.000000e+00
                                                                    0.000000
           0.041667
                                 1.387779e-17
                                                  1.387779e-17
     1
                                                                    0.041667
     2
           0.000000
                                 0.000000e+00
                                                 1.000000e+00
                                                                    0.000000
                                 0.000000e+00
                                                 0.000000e+00
     3
           0.000000
                                                                    0.000000
     4
           0.000000
                                 1.000000e+00
                                                 0.000000e+00
                                                                    0.000000
           REGION_SP
                      REGION_Taipei
                                      REGION_Tokyo
                                                    REGION_VIC
                                                                 REGION_Vizcaya
       0.000000e+00
                           0.000000
                                          0.000000
                                                       0.000000
                                                                       0.000000
       1.387779e-17
                           0.041667
                                          0.041667
                                                       0.041667
                                                                       0.041667
     1
     2 0.000000e+00
                           0.000000
                                          0.000000
                                                       0.000000
                                                                       0.000000
```

0.000000

0.000000

0.000000

0.000000

```
4 0.00000e+00
                      0.000000
                                     0.000000
                                                 0.000000
                                                                 0.000000
  REGION_Washington REGION_West Midlands
            0.000000
0
                                  0.000000
            0.041667
                                  0.041667
1
2
            0.000000
                                  0.000000
3
            0.000000
                                  0.000000
            0.000000
                                  0.000000
[5 rows x 43 columns]
```

De centra van de clusters worden geëxtraheerd en weergegeven. Voor elk punt in de dataset wordt de afstand tot elk clustercentrum berekend, en het punt wordt toegewezen aan het dichtstbijzijnde cluster.

```
[]: for src index, in df.iterrows():
        euclidian distances = dict()
        print(f"Afstand van bronindex {src index} tot...")
        for centrumindex, _ in kmeans_centra.iterrows():
            print(f"\tCentrumindex {centrumindex}:")
            euclidian_sum = 0
            for column_name in kmeans_centra.columns:
               current_difference = df.at[src_index, column_name] - kmeans_centra.
     →at[centrumindex, column_name]
               print(f'\t\t{df.at[src_index, column_name]} - {kmeans_centra.
     at[centrumindex, column_name]} = {current_difference}')
               euclidian_sum += current_difference ** 2
            print(f'\tTotale euclidische som: {euclidian_sum}')
            euclidian_distance = math.sqrt(euclidian_sum)
            print(f'\tEuclidische afstand: {euclidian_distance}')
            euclidian_distances[centrumindex] = euclidian_distance
            print('----')
        print(euclidian_distances)
        centrum_number = min(euclidian_distances, key = euclidian_distances.get)
        print(centrum number)
        df.at[src_index, 'Centrum'] = centrum_number
        print("======"")
    df
```

```
Afstand van bronindex 0 tot...

Centrumindex 0:

False - 0.0 = 0.0

False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
       False -0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 3.0
Euclidische afstand: 1.7320508075688772
Centrumindex 1:
        False -1.3877787807814457e-17 = -1.3877787807814457e-17
        False - 0.0416666666666666 = -0.041666666666668
```

False - 0.0416666666666666 = -0.041666666666668

```
False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       True - 0.0416666666666666 = 0.958333333333333334
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
Totale euclidische som: 0.9774305555555571
Euclidische afstand: 0.9886508764753902
  ._____
Centrumindex 2:
       False - 0.0 = 0.0
       False - 0.0 = 0.0
       False - 0.0 = 0.0
       False - 0.0 = 0.0
```

False - 0.0416666666666666 = -0.041666666666668

```
False - 0.0 = 0.0
               False - 0.0 = 0.0
               True -0.0 = 1.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 1.0 = -1.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 1.0 = -1.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
       Totale euclidische som: 3.0
       Euclidische afstand: 1.7320508075688772
_____
       Centrumindex 3:
               False -0.0 = 0.0
               False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 3.0
Euclidische afstand: 1.7320508075688772
Centrumindex 4:
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
```

False - 0.0 = 0.0False - 0.0 = 0.0

428

```
True -0.0 = 1.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 1.0 = -1.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
       Totale euclidische som: 3.0
       Euclidische afstand: 1.7320508075688772
-----
{0: 1.7320508075688772, 1: 0.9886508764753902, 2: 1.7320508075688772, 3:
1.7320508075688772, 4: 1.7320508075688772}
______
Afstand van bronindex 1 tot...
       Centrumindex 0:
              False - 0.0 = 0.0
              False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        True - 0.0 = 1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 3.0
Euclidische afstand: 1.7320508075688772
Centrumindex 1:
        False -1.3877787807814457e-17 = -1.3877787807814457e-17
        False - 0.0416666666666666 = -0.041666666666668
```

False - 0.0416666666666666 = -0.041666666666668

```
False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       True - 0.0416666666666666 = 0.95833333333333334
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
Totale euclidische som: 0.9774305555555567
Euclidische afstand: 0.98865087647539
  ._____
Centrumindex 2:
       False - 0.0 = 0.0
       False - 0.0 = 0.0
       False - 0.0 = 0.0
       False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               True - 0.0 = 1.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 1.0 = -1.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 1.0 = -1.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
       Totale euclidische som: 3.0
       Euclidische afstand: 1.7320508075688772
_____
       Centrumindex 3:
               False -0.0 = 0.0
               False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 3.0
Euclidische afstand: 1.7320508075688772
        False - 1.0 = -1.0
        False - 0.0 = 0.0
```

### Centrumindex 4:

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0

```
False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              True - 0.0 = 1.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 1.0 = -1.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
       Totale euclidische som: 3.0
       Euclidische afstand: 1.7320508075688772
_____
{0: 1.7320508075688772, 1: 0.98865087647539, 2: 1.7320508075688772, 3:
1.7320508075688772, 4: 1.7320508075688772}
______
Afstand van bronindex 2 tot...
       Centrumindex 0:
              False - 0.0 = 0.0
              False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 3.0
Euclidische afstand: 1.7320508075688772
        False -1.3877787807814457e-17 = -1.3877787807814457e-17
```

## Centrumindex 1:

False - 0.0416666666666666 = -0.041666666666668

False - 0.0416666666666666 = -0.041666666666668

```
False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       True - 0.0416666666666666 = 0.958333333333333334
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
Totale euclidische som: 0.977430555555557
Euclidische afstand: 0.9886508764753901
  ._____
Centrumindex 2:
       False - 0.0 = 0.0
       False - 0.0 = 0.0
       False - 0.0 = 0.0
       False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
               True -0.0 = 1.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 1.0 = -1.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 1.0 = -1.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
       Totale euclidische som: 3.0
       Euclidische afstand: 1.7320508075688772
_____
       Centrumindex 3:
               False -0.0 = 0.0
               False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        True - 0.0 = 1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 3.0
Euclidische afstand: 1.7320508075688772
```

### Centrumindex 4:

False - 1.0 = -1.0 False - 0.0 = 0.0 False - 0.0 = 0.0

```
False - 0.0 = 0.0
              True -0.0 = 1.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 1.0 = -1.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
       Totale euclidische som: 3.0
       Euclidische afstand: 1.7320508075688772
.....
{0: 1.7320508075688772, 1: 0.9886508764753901, 2: 1.7320508075688772, 3:
1.7320508075688772, 4: 1.7320508075688772}
______
Afstand van bronindex 3 tot...
       Centrumindex 0:
              False - 0.0 = 0.0
              False - 0.0 = 0.0
```

False - 0.0 = 0.0

```
False - 0.0 = 0.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 1.0 = -1.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
       False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
       False -0.0 = 0.0
        False -0.0 = 0.0
       False - 0.0 = 0.0
        False - 0.0 = 0.0
        True - 0.0 = 1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
       False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
Centrumindex 1:
        False -1.3877787807814457e-17 = -1.3877787807814457e-17
```

```
False - 0.0416666666666666 = -0.041666666666668
       True - 0.0416666666666666 = 0.95833333333333333
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       True - 0.0416666666666666 = 0.958333333333333334
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
Totale euclidische som: 1.894097222222224
Euclidische afstand: 1.376262047076146
   _____
Centrumindex 2:
       False - 0.0 = 0.0
       False - 0.0 = 0.0
       False - 0.0 = 0.0
       False - 0.0 = 0.0
```

```
True - 0.0 = 1.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 1.0 = -1.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               True -0.0 = 1.0
               False - 0.0 = 0.0
               False - 1.0 = -1.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False -0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
       Totale euclidische som: 4.0
       Euclidische afstand: 2.0
_____
       Centrumindex 3:
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               True -0.0 = 1.0
```

```
False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
Centrumindex 4:
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
```

True - 0.0 = 1.0False - 0.0 = 0.0

```
False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              True -0.0 = 1.0
              False - 0.0 = 0.0
              False - 1.0 = -1.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False -0.0 = 0.0
              False -0.0 = 0.0
       Totale euclidische som: 4.0
       Euclidische afstand: 2.0
  -----
{0: 2.0, 1: 1.376262047076146, 2: 2.0, 3: 2.0, 4: 2.0}
______
Afstand van bronindex 4 tot...
       Centrumindex 0:
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
       False - 0.0 = 0.0
       False - 0.0 = 0.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
        False -1.3877787807814457e-17 = -1.3877787807814457e-17
        False - 0.0416666666666666 = -0.041666666666668
```

#### Centrumindex 1:

False - 0.0416666666666666 = -0.041666666666668

False - 0.0416666666666666 = -0.041666666666668

```
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       True -1.3877787807814457e-17 = 1.0
       False - 0.0416666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       True - 1.3877787807814457e-17 = 1.0
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.0416666666666668
Totale euclidische som: 2.0607638888888897
Euclidische afstand: 1.4355360980793517
Centrumindex 2:
       False -0.0 = 0.0
       False - 0.0 = 0.0
```

False - 0.0416666666666666 = -0.041666666666668

```
False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        True -1.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        True -1.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 0.0
Euclidische afstand: 0.0
Centrumindex 3:
        False - 0.0 = 0.0
        False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
       False -0.0 = 0.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
```

## Centrumindex 4:

False - 1.0 = -1.0 False - 0.0 = 0.0 False - 0.0 = 0.0

```
False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               True - 0.0 = 1.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 1.0 = -1.0
               True -0.0 = 1.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
       Totale euclidische som: 4.0
       Euclidische afstand: 2.0
{0: 2.0, 1: 1.4355360980793517, 2: 0.0, 3: 2.0, 4: 2.0}
______
Afstand van bronindex 5 tot...
       Centrumindex 0:
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               True -0.0 = 1.0
```

False - 0.0 = 0.0

```
False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False -0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              True -0.0 = 1.0
              False -1.0 = -1.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False -0.0 = 0.0
              False -0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
       Totale euclidische som: 4.0
       Euclidische afstand: 2.0
______
       Centrumindex 1:
              False -1.3877787807814457e-17 = -1.3877787807814457e-17
              False - 0.0416666666666666 = -0.041666666666668
              False - 0.0416666666666666 = -0.041666666666668
              True - 0.0416666666666666 = 0.95833333333333333
              False - 0.0416666666666666 = -0.041666666666668
```

False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0

```
False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.04166666666666666 = -0.0416666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
       True - 0.0416666666666666 = 0.95833333333333334
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
Totale euclidische som: 1.894097222222224
Euclidische afstand: 1.376262047076146
Centrumindex 2:
       False - 0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
       True -0.0 = 1.0
       False - 0.0 = 0.0
       False - 0.0 = 0.0
```

False -1.3877787807814457e-17 = -1.3877787807814457e-17

```
False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
       False -0.0 = 0.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
Centrumindex 3:
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        True - 0.0 = 1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
Centrumindex 4:
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
```

False - 0.0 = 0.0

```
False - 0.0 = 0.0
                False -0.0 = 0.0
                False - 0.0 = 0.0
                False - 0.0 = 0.0
                False -0.0 = 0.0
                False - 0.0 = 0.0
                False -0.0 = 0.0
                False - 0.0 = 0.0
                False -0.0 = 0.0
                True -0.0 = 1.0
                False - 0.0 = 0.0
                False - 1.0 = -1.0
                False - 0.0 = 0.0
                False - 0.0 = 0.0
        Totale euclidische som: 4.0
        Euclidische afstand: 2.0
{0: 2.0, 1: 1.376262047076146, 2: 2.0, 3: 2.0, 4: 2.0}
Afstand van bronindex 6 tot...
        Centrumindex 0:
                False -0.0 = 0.0
                False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
Centrumindex 1:
        False -1.3877787807814457e-17 = -1.3877787807814457e-17
        False - 0.0416666666666666 = -0.041666666666668
        False - 1.3877787807814457e-17 = -1.3877787807814457e-17
```

False - 1.0 = -1.0False - 0.0 = 0.0

```
False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       True - 0.0416666666666666 = 0.95833333333333333
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       True - 0.0416666666666666 = 0.958333333333333334
       False - 0.0416666666666666 = -0.041666666666668
Totale euclidische som: 1.8940972222222222
Euclidische afstand: 1.3762620470761457
Centrumindex 2:
       False -0.0 = 0.0
       False - 0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False -0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
Centrumindex 3:
        False - 0.0 = 0.0
        False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False - 0.0 = 0.0
True -0.0 = 1.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False - 1.0 = -1.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False - 1.0 = -1.0
False - 0.0 = 0.0
True - 0.0 = 1.0
False - 0.0 = 0.0
```

Euclidische afstand: 2.0

Totale euclidische som: 4.0

#### Centrumindex 4:

False - 1.0 = -1.0 False - 0.0 = 0.0 False - 0.0 = 0.0

```
False - 0.0 = 0.0
                False -0.0 = 0.0
                False - 0.0 = 0.0
                False -0.0 = 0.0
                False - 0.0 = 0.0
                False - 0.0 = 0.0
                False -0.0 = 0.0
                False - 0.0 = 0.0
                True -0.0 = 1.0
                False - 0.0 = 0.0
                False -0.0 = 0.0
                False - 0.0 = 0.0
                False - 1.0 = -1.0
                False - 0.0 = 0.0
                True -0.0 = 1.0
                False - 0.0 = 0.0
        Totale euclidische som: 4.0
        Euclidische afstand: 2.0
{0: 2.0, 1: 1.3762620470761457, 2: 2.0, 3: 2.0, 4: 2.0}
1
Afstand van bronindex 7 tot...
        Centrumindex 0:
                False - 0.0 = 0.0
                False - 1.0 = -1.0
```

```
False - 0.0 = 0.0
        True -0.0 = 1.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        True -0.0 = 1.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
       False -0.0 = 0.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
Centrumindex 1:
        False -1.3877787807814457e-17 = -1.3877787807814457e-17
        False - 0.0416666666666666 = -0.041666666666668
        False - 0.0416666666666666 = -0.041666666666668
        False - 0.0416666666666666 = -0.041666666666668
        False - 0.0416666666666666 = -0.041666666666668
```

False - 0.0416666666666666 = -0.041666666666668

False -1.3877787807814457e-17 = -1.3877787807814457e-17

```
False - 0.0416666666666666 = -0.041666666666668
       True - 0.0416666666666666 = 0.95833333333333334
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       True - 0.0416666666666666 = 0.95833333333333334
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
Totale euclidische som: 1.8940972222222237
Euclidische afstand: 1.376262047076146
Centrumindex 2:
       False - 0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        True - 0.0 = 1.0
       False -0.0 = 0.0
        False - 0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
       False - 0.0 = 0.0
       False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
       False - 0.0 = 0.0
        False - 0.0 = 0.0
       False -0.0 = 0.0
        True -0.0 = 1.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
       False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
       False -0.0 = 0.0
Totale euclidische som: 4.0
```

Euclidische afstand: 2.0

#### Centrumindex 3:

False - 0.0 = 0.0 False - 0.0 = 0.0

False - 0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0Totale euclidische som: 4.0

# Euclidische afstand: 2.0

#### Centrumindex 4:

False - 1.0 = -1.0 False - 0.0 = 0.0 False - 0.0 = 0.0

```
False - 0.0 = 0.0
               True -0.0 = 1.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               True -0.0 = 1.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 1.0 = -1.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
       Totale euclidische som: 4.0
       Euclidische afstand: 2.0
_____
{0: 2.0, 1: 1.376262047076146, 2: 2.0, 3: 2.0, 4: 2.0}
Afstand van bronindex 8 tot...
       Centrumindex 0:
               False - 0.0 = 0.0
               False - 1.0 = -1.0
               False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
        True - 0.0 = 1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        True -0.0 = 1.0
        False -0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
Centrumindex 1:
        False - 1.3877787807814457e-17 = -1.3877787807814457e-17
        False - 0.0416666666666666 = -0.041666666666668
        False - 0.0416666666666666 = -0.041666666666668
        False - 0.0416666666666666 = -0.041666666666668
        False - 0.0416666666666666 = -0.041666666666668
```

False - 0.0 = 0.0

False - 0.04166666666666666 = -0.04166666666666668 False - 0.0416666666666666 = -0.041666666666668

False -1.3877787807814457e-17 = -1.3877787807814457e-17

```
False - 0.0416666666666666 = -0.041666666666668
       True - 0.0416666666666666 = 0.958333333333333334
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       True - 0.0416666666666666 = 0.95833333333333334
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
Totale euclidische som: 1.8940972222222237
Euclidische afstand: 1.376262047076146
Centrumindex 2:
       False -0.0 = 0.0
       False - 0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
```

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0True - 0.0 = 1.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0True -0.0 = 1.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0Totale euclidische som: 4.0

### Euclidische afstand: 2.0

#### Centrumindex 3:

False - 0.0 = 0.0 False - 0.0 = 0.0

```
False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -1.0 = -1.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
Centrumindex 4:
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
```

False - 0.0 = 0.0 False - 0.0 = 0.0

#### 468

```
False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               True - 0.0 = 1.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               True -0.0 = 1.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 1.0 = -1.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
       Totale euclidische som: 4.0
       Euclidische afstand: 2.0
{0: 2.0, 1: 1.376262047076146, 2: 2.0, 3: 2.0, 4: 2.0}
______
Afstand van bronindex 9 tot...
       Centrumindex 0:
               False - 0.0 = 0.0
               False - 1.0 = -1.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        True - 0.0 = 1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 3.0
Euclidische afstand: 1.7320508075688772
Centrumindex 1:
        False -1.3877787807814457e-17 = -1.3877787807814457e-17
        False - 0.0416666666666666 = -0.041666666666668
        False - 1.3877787807814457e-17 = -1.3877787807814457e-17
```

False - 0.04166666666666666 = -0.0416666666666668 False - 0.0416666666666666 = -0.0416666666666668 False - 0.0416666666666666 = -0.0416666666666668

```
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
True - 0.0416666666666666 = 0.958333333333333334
False - 0.04166666666666666 = -0.0416666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.0416666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.0416666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
```

Totale euclidische som: 0.9774305555555569 Euclidische afstand: 0.9886508764753901

# Centrumindex 2:

False - 0.0 = 0.0 False - 0.0 = 0.0

```
False - 0.0 = 0.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 3.0
Euclidische afstand: 1.7320508075688772
Centrumindex 3:
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
```

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0 False - 0.0 = 0.0True - 0.0 = 1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

False - 0.0 = 0.0

# Centrumindex 4:

False - 1.0 = -1.0 False - 0.0 = 0.0 False - 0.0 = 0.0

```
True -0.0 = 1.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 1.0 = -1.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
       Totale euclidische som: 3.0
       Euclidische afstand: 1.7320508075688772
   _____
{0: 1.7320508075688772, 1: 0.9886508764753901, 2: 1.7320508075688772, 3:
1.7320508075688772, 4: 1.7320508075688772}
______
Afstand van bronindex 10 tot...
       Centrumindex 0:
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              True -1.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False - 0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
       False -0.0 = 0.0
       False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
       False - 0.0 = 0.0
        False - 0.0 = 0.0
       False -0.0 = 0.0
        False - 0.0 = 0.0
       False -0.0 = 0.0
       False -0.0 = 0.0
        True -1.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 0.0
Euclidische afstand: 0.0
Centrumindex 1:
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
        False - 0.0416666666666666 = -0.041666666666668
        True - 1.3877787807814457e-17 = 1.0
        False - 0.0416666666666666 = -0.041666666666668
        False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
```

```
False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.0416666666666668
       True - 1.3877787807814457e-17 = 1.0
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
Euclidische afstand: 1.435536098079352
```

Totale euclidische som: 2.0607638888888906

### Centrumindex 2:

False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0

```
False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
Centrumindex 3:
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        True -0.0 = 1.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
```

.\_\_\_\_\_

### Centrumindex 4:

False - 1.0 = -1.0 False - 0.0 = 0.0 False - 0.0 = 0.0 False - 0.0 = 0.0 Talse - 0.0 = 1.0 True - 0.0 = 1.0 False - 0.0 = 0.0 False - 0.0 = 0.0

```
False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              True -0.0 = 1.0
              False - 1.0 = -1.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
       Totale euclidische som: 4.0
       Euclidische afstand: 2.0
    _____
\{0: 0.0, 1: 1.435536098079352, 2: 2.0, 3: 2.0, 4: 2.0\}
_____
Afstand van bronindex 11 tot...
       Centrumindex 0:
              False - 0.0 = 0.0
              False - 1.0 = -1.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 1.0 = -1.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
```

Eucliaibene albuma. 2.0

### Centrumindex 1:

```
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.04166666666666666 = -0.0416666666666668
False - 0.04166666666666666 = -0.0416666666666668
False - 0.04166666666666668 = -0.0416666666666668
False - 0.04166666666666668 = -0.0416666666666668
```

```
False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       True - 0.0416666666666666 = 0.95833333333333333
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.04166666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       True - 0.0416666666666666 = 0.95833333333333334
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
Totale euclidische som: 1.8940972222222222
Euclidische afstand: 1.3762620470761457
Centrumindex 2:
       False - 0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
       False -0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
Centrumindex 3:
       False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
```

False - 0.0 = 0.0 False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0True - 0.0 = 1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0True -0.0 = 1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0

# Euclidische afstand: 2.0

Totale euclidische som: 4.0

## Centrumindex 4:

False - 1.0 = -1.0
False - 0.0 = 0.0

```
False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              True -0.0 = 1.0
              False - 0.0 = 0.0
              False - 1.0 = -1.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              True -0.0 = 1.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
       Totale euclidische som: 4.0
       Euclidische afstand: 2.0
-----
{0: 2.0, 1: 1.3762620470761457, 2: 2.0, 3: 2.0, 4: 2.0}
   _____
Afstand van bronindex 12 tot...
       Centrumindex 0:
              False - 0.0 = 0.0
              False -1.0 = -1.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False -0.0 = 0.0
       False -0.0 = 0.0
        True - 0.0 = 1.0
       False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
       False - 1.0 = -1.0
       False -0.0 = 0.0
       False -0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
Centrumindex 1:
        False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
        False - 0.04166666666666666 = -0.041666666666668
        False - 0.0416666666666666 = -0.041666666666668
        False -1.3877787807814457e-17 = -1.3877787807814457e-17
        False - 0.0416666666666666 = -0.041666666666668
        False - 0.0416666666666666 = -0.041666666666668
```

False - 0.04166666666666666 = -0.0416666666666668 False - 0.0416666666666666 = -0.041666666666668 False - 0.04166666666666668 = -0.041666666666668

```
False - 0.0416666666666666 = -0.041666666666668
       True - 0.0416666666666666 = 0.958333333333333334
       False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False -0.041666666666666668 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       True - 0.0416666666666666 = 0.95833333333333333
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
Totale euclidische som: 1.8940972222222222
Euclidische afstand: 1.3762620470761457
Centrumindex 2:
       False -0.0 = 0.0
       False - 0.0 = 0.0
       False -0.0 = 0.0
       False -0.0 = 0.0
       False -0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
```

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0True - 0.0 = 1.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -1.0 = -1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0True -0.0 = 1.0False - 0.0 = 0.0False - 0.0 = 0.0

Totale euclidische som: 4.0 Euclidische afstand: 2.0

## Centrumindex 3:

False - 0.0 = 0.0

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0

# Euclidische afstand: 2.0

Totale euclidische som: 4.0

### Centrumindex 4:

False - 1.0 = -1.0
False - 0.0 = 0.0

```
False - 0.0 = 0.0
                False - 0.0 = 0.0
                False - 0.0 = 0.0
                True - 0.0 = 1.0
                False - 0.0 = 0.0
                False - 0.0 = 0.0
                False -0.0 = 0.0
                False - 0.0 = 0.0
                False - 0.0 = 0.0
                False -0.0 = 0.0
                False - 0.0 = 0.0
                False - 1.0 = -1.0
                False - 0.0 = 0.0
                True -0.0 = 1.0
                False -0.0 = 0.0
                False - 0.0 = 0.0
        Totale euclidische som: 4.0
        Euclidische afstand: 2.0
{0: 2.0, 1: 1.3762620470761457, 2: 2.0, 3: 2.0, 4: 2.0}
Afstand van bronindex 13 tot...
        Centrumindex 0:
                False - 0.0 = 0.0
                False - 0.0 = 0.0
                False -0.0 = 0.0
                False - 0.0 = 0.0
                False - 0.0 = 0.0
                False - 1.0 = -1.0
                False - 0.0 = 0.0
                False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False - 0.0 = 0.0
        True - 0.0 = 1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
       False -0.0 = 0.0
        False - 0.0 = 0.0
       False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
       False -0.0 = 0.0
       False -0.0 = 0.0
       False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
```

# Centrumindex 1:

```
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
```

```
False - 0.0416666666666666 = -0.041666666666668
       True - 0.0416666666666666 = 0.95833333333333334
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.04166666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       True - 0.0416666666666666 = 0.95833333333333334
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
Totale euclidische som: 1.894097222222237
Euclidische afstand: 1.376262047076146
       False -0.0 = 0.0
       False -0.0 = 0.0
```

## Centrumindex 2:

False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0

```
True - 0.0 = 1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
       False -0.0 = 0.0
        False - 0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
       False - 0.0 = 0.0
       False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
       False - 0.0 = 0.0
        False - 0.0 = 0.0
       False -0.0 = 0.0
       False - 1.0 = -1.0
       False - 0.0 = 0.0
       False - 0.0 = 0.0
       False - 0.0 = 0.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
       False - 0.0 = 0.0
Totale euclidische som: 4.0
```

# Euclidische afstand: 2.0

### Centrumindex 3:

False - 0.0 = 0.0
Talse - 0.0 = 0.0

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0

Euclidische afstand: 2.0

Totale euclidische som: 4.0

# Centrumindex 4:

False - 1.0 = -1.0
False - 0.0 = 0.0

```
False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 1.0 = -1.0
               False -0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               True -0.0 = 1.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
       Totale euclidische som: 4.0
       Euclidische afstand: 2.0
{0: 2.0, 1: 1.376262047076146, 2: 2.0, 3: 2.0, 4: 2.0}
1
_____
Afstand van bronindex 14 tot...
       Centrumindex 0:
               False -0.0 = 0.0
               True - 0.0 = 1.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 1.0 = -1.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
```

False - 0.0 = 0.0

### Centrumindex 1:

```
False -1.3877787807814457e-17 = -1.3877787807814457e-17
True - 0.0416666666666666 = 0.958333333333333334
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
```

```
False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.0416666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       True - 0.0416666666666666 = 0.95833333333333334
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
Totale euclidische som: 1.894097222222224
```

Euclidische afstand: 1.376262047076146

# Centrumindex 2:

False -0.0 = 0.0True -0.0 = 1.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False -0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0False - 0.0 = 0.0False - 0.0 = 0.0

Totale euclidische som: 4.0 Euclidische afstand: 2.0

#### -----

Centrumindex 3: False - 0.0 = 0.0True -0.0 = 1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0 False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0False - 0.0 = 0.0False - 0.0 = 0.0

Totale euclidische som: 4.0 Euclidische afstand: 2.0

-----

# Centrumindex 4:

False - 1.0 = -1.0True - 0.0 = 1.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0

```
False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 1.0 = -1.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              True -0.0 = 1.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
       Totale euclidische som: 4.0
       Euclidische afstand: 2.0
_____
{0: 2.0, 1: 1.376262047076146, 2: 2.0, 3: 2.0, 4: 2.0}
______
Afstand van bronindex 15 tot...
       Centrumindex 0:
              False -0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 1.0 = -1.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False -0.0 = 0.0
       False -0.0 = 0.0
        False - 0.0 = 0.0
       False -0.0 = 0.0
        False - 0.0 = 0.0
        True -0.0 = 1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
       False -0.0 = 0.0
        True -0.0 = 1.0
       False -0.0 = 0.0
        False - 0.0 = 0.0
       False - 0.0 = 0.0
Totale euclidische som: 4.0
```

Euclidische afstand: 2.0

### Centrumindex 1:

```
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.041666666666666668 = -0.041666666666668
False - 0.04166666666666668 = -0.041666666666668
False - 0.04166666666666668 = -0.041666666666668
False - 0.0416666666666668 = -0.041666666666668
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.04166666666666668 = -0.041666666666668
False - 0.0416666666666668 = -0.0416666666666668
```

```
False - 0.0416666666666666 = -0.041666666666668
       True - 1.3877787807814457e-17 = 1.0
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       True - 1.3877787807814457e-17 = 1.0
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
Totale euclidische som: 2.0607638888888893
Euclidische afstand: 1.4355360980793515
Centrumindex 2:
       False - 0.0 = 0.0
       False -0.0 = 0.0
       False -0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
       False -0.0 = 0.0
       False -0.0 = 0.0
       False -0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
```

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0True - 0.0 = 1.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 1.0 = -1.0False -0.0 = 0.0True -0.0 = 1.0False -0.0 = 0.0False - 0.0 = 0.0

Totale euclidische som: 4.0 Euclidische afstand: 2.0

# -----

Centrumindex 3:

False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0 False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0True -1.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0True -1.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0

Totale euclidische som: 0.0 Euclidische afstand: 0.0

\_\_\_\_\_

# Centrumindex 4:

False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0

```
False - 0.0 = 0.0
                False -0.0 = 0.0
                False - 0.0 = 0.0
                True -0.0 = 1.0
                False - 0.0 = 0.0
                False - 0.0 = 0.0
                False -0.0 = 0.0
                False - 0.0 = 0.0
                False - 1.0 = -1.0
                False - 0.0 = 0.0
                False - 0.0 = 0.0
                True -0.0 = 1.0
                False -0.0 = 0.0
                False - 0.0 = 0.0
                False -0.0 = 0.0
                False - 0.0 = 0.0
               False - 0.0 = 0.0
                False - 0.0 = 0.0
        Totale euclidische som: 4.0
        Euclidische afstand: 2.0
{0: 2.0, 1: 1.4355360980793515, 2: 2.0, 3: 0.0, 4: 2.0}
3
Afstand van bronindex 16 tot...
       Centrumindex 0:
               False -0.0 = 0.0
                False - 0.0 = 0.0
                False -0.0 = 0.0
                False - 0.0 = 0.0
                False - 0.0 = 0.0
                False - 1.0 = -1.0
                False - 0.0 = 0.0
                False - 0.0 = 0.0
                False - 0.0 = 0.0
                True -0.0 = 1.0
                False - 0.0 = 0.0
                False - 0.0 = 0.0
                False - 0.0 = 0.0
                False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False - 1.0 = -1.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
```

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

#### -----

```
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.04166666666666668 = -0.04166666666668
False - 0.0416666666666668 = -0.04166666666668
False - 0.0416666666666668 = -0.04166666666668
False - 0.0416666666666668 = -0.041666666666668
False - 0.0416666666666668 = -0.041666666666668
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.04166666666666668 = -0.041666666666668
False - 0.041666666666668 = -0.041666666666668
False - 0.041666666666668 = -0.041666666666668
False - 0.041666666666668 = -0.041666666666668
False - 0.0416666666666668 = -0.041666666666668
False - 0.0416666666666668 = -0.041666666666668
False - 0.0416666666666668 = -0.041666666666668
False - 0.041666666666668 = -0.041666666666668
False - 0.0416666666666668 = -0.041666666666668
False - 0.0416666666666668 = -0.0416666666666688
False - 0.04166666666666688 = -0.04166666666666688
```

```
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.04166666666666666 = -0.0416666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.0416666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
```

Totale euclidische som: 0.977430555555557 Euclidische afstand: 0.9886508764753901

# Centrumindex 2:

False - 0.0 = 0.0
True - 0.0 = 1.0
False - 0.0 = 0.0

False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 1.0 = -1.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0

False - 0.0 = 0.0False - 0.0 = 0.0

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

#### -----

#### Centrumindex 3:

False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0True - 0.0 = 1.0False - 0.0 = 0.0False - 0.0 = 0.0

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

# \_\_\_\_\_\_

## Centrumindex 4:

False - 1.0 = -1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0False - 0.0 = 0.0False - 0.0 = 0.0

```
False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 1.0 = -1.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
       Totale euclidische som: 3.0
       Euclidische afstand: 1.7320508075688772
_____
{0: 1.7320508075688772, 1: 0.9886508764753901, 2: 1.7320508075688772, 3:
1.7320508075688772, 4: 1.7320508075688772}
Afstand van bronindex 17 tot...
       Centrumindex 0:
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 1.0 = -1.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
        True - 0.0 = 1.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
Totale euclidische som: 3.0
```

Euclidische afstand: 1.7320508075688772

```
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.041666666666666 = -0.041666666666668
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.0416666666666668
False - 0.04166666666666668 = -0.041666666666668
False - 0.04166666666666668 = -0.0416666666666668
```

```
False - 0.0416666666666666 = -0.041666666666668
       True - 0.0416666666666666 = 0.958333333333333334
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
Totale euclidische som: 0.977430555555555555
```

# Centrumindex 2:

False - 0.0 = 0.0

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 1.0 = -1.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0

False - 0.0 = 0.0 False - 0.0 = 0.0

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

#### .\_\_\_\_\_

#### Centrumindex 3:

False - 0.0 = 0.0

False - 0.0 = 0.0False - 0.0 = 0.0 False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

-----

False - 0.0 = 0.0

## Centrumindex 4:

False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0

```
False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              True - 0.0 = 1.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 1.0 = -1.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
       Totale euclidische som: 3.0
       Euclidische afstand: 1.7320508075688772
_____
{0: 1.7320508075688772, 1: 0.9886508764753899, 2: 1.7320508075688772, 3:
1.7320508075688772, 4: 1.7320508075688772}
______
Afstand van bronindex 18 tot...
       Centrumindex 0:
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 1.0 = -1.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        True -0.0 = 1.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False -0.0 = 0.0
        True -0.0 = 1.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
```

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```
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.041666666666666668 = -0.041666666666668
False - 0.04166666666666668 = -0.041666666666668
False - 0.04166666666666668 = -0.041666666666668
False - 0.0416666666666668 = -0.041666666666668
False - 0.0416666666666668 = -0.041666666666668
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.04166666666666668 = -0.041666666666668
False - 0.0416666666666668 = -0.0416666666666668
```

```
False - 0.0416666666666666 = -0.041666666666668
True - 0.0416666666666666 = 0.95833333333333334
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
True - 0.0416666666666666 = 0.95833333333333334
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
```

# Centrumindex 2:

False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0 False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0True - 0.0 = 1.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 1.0 = -1.0False -0.0 = 0.0False -0.0 = 0.0True -0.0 = 1.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0

Totale euclidische som: 4.0

Euclidische afstand: 2.0

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#### Centrumindex 3:

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0

False - 0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0True -0.0 = 1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0

Totale euclidische som: 4.0 Euclidische afstand: 2.0

#### 0----------------

Centrumindex 4: False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0

```
True - 0.0 = 1.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 1.0 = -1.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              True -0.0 = 1.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
       Totale euclidische som: 4.0
       Euclidische afstand: 2.0
_____
\{0: 2.0, 1: 1.3762620470761457, 2: 2.0, 3: 2.0, 4: 2.0\}
_____
Afstand van bronindex 19 tot...
       Centrumindex 0:
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 1.0 = -1.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
True - 0.0 = 1.0
False -0.0 = 0.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False - 1.0 = -1.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
```

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

#### \_\_\_\_\_

```
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
```

```
False - 0.0416666666666666 = -0.041666666666668
True - 0.0416666666666666 = 0.958333333333333334
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.04166666666666666 = -0.0416666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.0416666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
```

Totale euclidische som: 0.9774305555555564 Euclidische afstand: 0.9886508764753897

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## Centrumindex 2:

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0True -0.0 = 1.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

-----

False - 0.0 = 0.0False - 0.0 = 0.0

## Centrumindex 3:

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0False - 1.0 = -1.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

### \_\_\_\_\_

False - 0.0 = 0.0False - 0.0 = 0.0

### Centrumindex 4:

False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0

```
False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               True - 0.0 = 1.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 1.0 = -1.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
       Totale euclidische som: 3.0
       Euclidische afstand: 1.7320508075688772
_____
{0: 1.7320508075688772, 1: 0.9886508764753897, 2: 1.7320508075688772, 3:
1.7320508075688772, 4: 1.7320508075688772}
Afstand van bronindex 20 tot...
       Centrumindex 0:
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 1.0 = -1.0
               False - 0.0 = 0.0
               True -0.0 = 1.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False - 1.0 = -1.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
```

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

#### \_\_\_\_\_

```
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
True - 0.0416666666666666 = 0.958333333333333334
False - 0.0416666666666666 = -0.041666666666668
```

```
False - 0.0416666666666666 = -0.041666666666668
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.04166666666666666 = -0.0416666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.0416666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
```

Totale euclidische som: 0.977430555555557 Euclidische afstand: 0.9886508764753901

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## Centrumindex 2:

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0True -0.0 = 1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

\_\_\_\_\_\_

False - 0.0 = 0.0

# Centrumindex 3:

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0True - 0.0 = 1.0False - 0.0 = 0.0False - 0.0 = 0.0

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 1.0 = -1.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

### \_\_\_\_\_

False - 0.0 = 0.0False - 0.0 = 0.0

### Centrumindex 4:

False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0False - 0.0 = 0.0False - 0.0 = 0.0

```
False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 1.0 = -1.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
       Totale euclidische som: 3.0
       Euclidische afstand: 1.7320508075688772
_____
{0: 1.7320508075688772, 1: 0.9886508764753901, 2: 1.7320508075688772, 3:
1.7320508075688772, 4: 1.7320508075688772}
Afstand van bronindex 21 tot...
       Centrumindex 0:
               False - 0.0 = 0.0
               False - 0.0 = 0.0
               True - 0.0 = 1.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
               False - 1.0 = -1.0
               False - 0.0 = 0.0
               False -0.0 = 0.0
               False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
        False -0.0 = 0.0
       False -0.0 = 0.0
        False - 0.0 = 0.0
       False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 1.0 = -1.0
       False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
       False -0.0 = 0.0
       False -0.0 = 0.0
       False -0.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        True -0.0 = 1.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
```

#### -----

```
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
True - 0.0416666666666666 = 0.958333333333333334
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
```

```
False - 0.0416666666666666 = -0.041666666666668
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.04166666666666666 = -0.0416666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       True - 0.0416666666666666 = 0.95833333333333334
Totale euclidische som: 1.894097222222224
```

Euclidische afstand: 1.376262047076146

\_\_\_\_\_

#### Centrumindex 2:

False - 0.0 = 0.0False - 0.0 = 0.0True - 0.0 = 1.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0

False - 0.0 = 0.0False - 0.0 = 0.0

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0True -0.0 = 1.0

Totale euclidische som: 4.0 Euclidische afstand: 2.0

# Centrumindex 3:

False - 0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 1.0 = -1.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0

Totale euclidische som: 4.0 Euclidische afstand: 2.0

## -----

### Centrumindex 4:

False - 1.0 = -1.0False - 0.0 = 0.0True - 0.0 = 1.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0

```
False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 1.0 = -1.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              True -0.0 = 1.0
       Totale euclidische som: 4.0
       Euclidische afstand: 2.0
_____
{0: 2.0, 1: 1.376262047076146, 2: 2.0, 3: 2.0, 4: 2.0}
_____
Afstand van bronindex 22 tot...
       Centrumindex 0:
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 1.0 = -1.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False - 0.0 = 0.0
True - 0.0 = 1.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False - 1.0 = -1.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
```

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

\_\_\_\_\_

```
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
```

```
False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       True - 0.0416666666666666 = 0.958333333333333334
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.04166666666666666 = -0.041666666666668
Totale euclidische som: 0.9774305555555562
```

Euclidische afstand: 0.9886508764753897

\_\_\_\_\_\_

### Centrumindex 2:

False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0

False - 0.0 = 0.0False -0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0True -0.0 = 1.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

### \_\_\_\_\_

False - 0.0 = 0.0

### Centrumindex 3:

False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0True - 0.0 = 1.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0

False -0.0 = 0.0

False - 0.0 = 0.0

False - 0.0 = 0.0

False - 0.0 = 0.0

Totale euclidische som: 3.0

 ${\tt Euclidische\ afstand:\ 1.7320508075688772}$ 

# Centrumindex 4:

False - 1.0 = -1.0

False - 0.0 = 0.0

False -0.0 = 0.0

False - 0.0 = 0.0

```
False - 0.0 = 0.0
              False -0.0 = 0.0
              True - 0.0 = 1.0
              False - 0.0 = 0.0
              False -1.0 = -1.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
       Totale euclidische som: 3.0
       Euclidische afstand: 1.7320508075688772
_____
{0: 1.7320508075688772, 1: 0.9886508764753897, 2: 1.7320508075688772, 3:
1.7320508075688772, 4: 1.7320508075688772}
_____
Afstand van bronindex 23 tot...
       Centrumindex 0:
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 1.0 = -1.0
              False - 0.0 = 0.0
              True -0.0 = 1.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False - 1.0 = -1.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
```

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

### .\_\_\_\_\_

```
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
True - 0.0416666666666666 = 0.958333333333333334
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
```

```
False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
Totale euclidische som: 0.9774305555555571
   ______
```

Euclidische afstand: 0.9886508764753902

### Centrumindex 2:

False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0True -0.0 = 1.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0

False - 0.0 = 0.0False -0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

### \_\_\_\_\_

False - 0.0 = 0.0

### Centrumindex 3:

False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0 False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0

False -0.0 = 0.0False -0.0 = 0.0

False - 0.0 = 0.0

False - 0.0 = 0.0

Totale euclidische som: 3.0

 ${\tt Euclidische\ afstand:\ 1.7320508075688772}$ 

### Centrumindex 4:

False - 1.0 = -1.0False - 0.0 = 0.0

False -0.0 = 0.0False -0.0 = 0.0

True - 0.0 = 1.0

False - 0.0 = 0.0

False -0.0 = 0.0

False - 0.0 = 0.0

```
False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -1.0 = -1.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
       Totale euclidische som: 3.0
       Euclidische afstand: 1.7320508075688772
_____
{0: 1.7320508075688772, 1: 0.9886508764753902, 2: 1.7320508075688772, 3:
1.7320508075688772, 4: 1.7320508075688772}
_____
Afstand van bronindex 24 tot...
       Centrumindex 0:
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 1.0 = -1.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
True -0.0 = 1.0
False -0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False - 1.0 = -1.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
```

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

\_\_\_\_\_

### Centrumindex 1:

```
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
```

```
False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       True - 0.0416666666666666 = 0.958333333333333334
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
Totale euclidische som: 0.9774305555555562
```

Euclidische afstand: 0.9886508764753897

\_\_\_\_\_\_

### Centrumindex 2:

False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0

False - 0.0 = 0.0False -0.0 = 0.0False - 1.0 = -1.0True - 0.0 = 1.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

### \_\_\_\_\_

False - 0.0 = 0.0

### Centrumindex 3:

False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False -0.0 = 0.0True - 0.0 = 1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0

False -0.0 = 0.0

False - 0.0 = 0.0

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

## Centrumindex 4:

False - 1.0 = -1.0

False - 0.0 = 0.0

False -0.0 = 0.0

False - 0.0 = 0.0

False -0.0 = 0.0

False - 0.0 = 0.0

False - 0.0 = 0.0

False -0.0 = 0.0

False - 0.0 = 0.0

```
False - 0.0 = 0.0
              True -0.0 = 1.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -1.0 = -1.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
       Totale euclidische som: 3.0
       Euclidische afstand: 1.7320508075688772
_____
{0: 1.7320508075688772, 1: 0.9886508764753897, 2: 1.7320508075688772, 3:
1.7320508075688772, 4: 1.7320508075688772}
_____
Afstand van bronindex 25 tot...
       Centrumindex 0:
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 1.0 = -1.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
False - 0.0 = 0.0
True - 0.0 = 1.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False - 1.0 = -1.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
```

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

### -----

### Centrumindex 1:

```
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
```

```
False - 0.0416666666666666 = -0.041666666666668
       True - 0.0416666666666666 = 0.958333333333333334
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
Totale euclidische som: 0.9774305555555566
  ______
```

Euclidische afstand: 0.9886508764753899

### Centrumindex 2:

False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0 True - 0.0 = 1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

### \_\_\_\_\_

False - 0.0 = 0.0

### Centrumindex 3:

False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0

False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0

False - 0.0 = 0.0False - 0.0 = 0.0

False - 0.0 = 0.0

False - 1.0 = -1.0False - 0.0 = 0.0

False -0.0 = 0.0

False - 0.0 = 0.0

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

## Centrumindex 4:

False - 1.0 = -1.0

False - 0.0 = 0.0

False -0.0 = 0.0False - 0.0 = 0.0

False -0.0 = 0.0

False - 0.0 = 0.0

False - 0.0 = 0.0

False -0.0 = 0.0

False - 0.0 = 0.0

True - 0.0 = 1.0

```
False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False -1.0 = -1.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
       Totale euclidische som: 3.0
       Euclidische afstand: 1.7320508075688772
_____
{0: 1.7320508075688772, 1: 0.9886508764753899, 2: 1.7320508075688772, 3:
1.7320508075688772, 4: 1.7320508075688772}
_____
Afstand van bronindex 26 tot...
       Centrumindex 0:
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 1.0 = -1.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              True -0.0 = 1.0
```

```
False - 0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False - 1.0 = -1.0
False - 0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False -0.0 = 0.0
False - 0.0 = 0.0
False -0.0 = 0.0
```

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

### -----

### Centrumindex 1:

```
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
True - 0.0416666666666666 = 0.95833333333333333
False - 0.0416666666666666 = -0.041666666666668
```

```
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.0416666666666668
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False -1.3877787807814457e-17 = -1.3877787807814457e-17
False - 0.0416666666666666 = -0.041666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.0416666666666668
False - 0.0416666666666666 = -0.041666666666668
False - 0.04166666666666666 = -0.0416666666666668
False - 0.04166666666666666 = -0.041666666666668
```

Totale euclidische som: 0.9774305555555567

\_\_\_\_\_\_

Euclidische afstand: 0.98865087647539

### Centrumindex 2:

False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0False - 0.0 = 0.0False - 0.0 = 0.0 False - 0.0 = 0.0False -0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

### \_\_\_\_\_

False - 0.0 = 0.0

### Centrumindex 3:

False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0True - 0.0 = 1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0 False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0

False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0

False - 0.0 = 0.0

Totale euclidische som: 3.0

Euclidische afstand: 1.7320508075688772

Centrumindex 4: False - 1.0 = -1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0False - 0.0 = 0.0

> False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0

```
False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
              False -1.0 = -1.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
       Totale euclidische som: 3.0
       Euclidische afstand: 1.7320508075688772
_____
{0: 1.7320508075688772, 1: 0.98865087647539, 2: 1.7320508075688772, 3:
1.7320508075688772, 4: 1.7320508075688772}
_____
Afstand van bronindex 27 tot...
       Centrumindex 0:
              True -0.0 = 1.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 1.0 = -1.0
              False - 0.0 = 0.0
              False -0.0 = 0.0
              False - 0.0 = 0.0
```

```
False - 0.0 = 0.0
       False -0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
       False - 0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
       False - 0.0 = 0.0
       False - 1.0 = -1.0
       True -0.0 = 1.0
       False - 0.0 = 0.0
       False -0.0 = 0.0
       False - 0.0 = 0.0
       False -0.0 = 0.0
Totale euclidische som: 4.0
Euclidische afstand: 2.0
Centrumindex 1:
       True - 1.3877787807814457e-17 = 1.0
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
```

False - 0.0 = 0.0

False - 0.04166666666666666 = -0.04166666666666668 False - 0.0416666666666666 = -0.041666666666668

```
False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       True - 1.3877787807814457e-17 = 1.0
       False - 1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False -1.3877787807814457e-17 = -1.3877787807814457e-17
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
       False - 0.04166666666666666 = -0.0416666666666668
       False - 0.0416666666666666 = -0.041666666666668
Totale euclidische som: 2.0607638888888906
```

Euclidische afstand: 1.435536098079352

-----

### Centrumindex 2:

True -0.0 = 1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0 False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0True -0.0 = 1.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0

Totale euclidische som: 4.0 Euclidische afstand: 2.0

-----

### Centrumindex 3:

True -0.0 = 1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0 False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0True - 0.0 = 1.0False - 0.0 = 0.0False - 0.0 = 0.0False - 1.0 = -1.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0

Totale euclidische som: 4.0 Euclidische afstand: 2.0

-----

False - 0.0 = 0.0

### Centrumindex 4:

True -1.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0False - 0.0 = 0.0False -0.0 = 0.0False - 0.0 = 0.0

```
False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
        True -1.0 = 0.0
        False - 0.0 = 0.0
        False -0.0 = 0.0
        False - 0.0 = 0.0
        False - 0.0 = 0.0
Totale euclidische som: 0.0
```

Euclidische afstand: 0.0

False

False

False

13

14

15

{0: 2.0, 1: 1.435536098079352, 2: 2.0, 3: 2.0, 4: 0.0}

4

[]: CITY\_Boston CITY\_Calgary \ CITY\_Amsterdam CITY\_Bilbao CITY\_Birmingham 0 False False False False False 1 False False False False False 2 False False False False False 3 False False False False True 4 False False False False False 5 False False False True False 6 False False False False False 7 False False False False False 8 False False False False False 9 False False False False False 10 False False False False False 11 False False False False False 12 False False False False False

False

True

False

16	False	False	False	Fals	10	False	
17	False	False	False	Fals		False	
18	False	False	False	Fals		False	
19	False	False	False	Fals		False	
20	False	False	False	Fals		False	
21	False	False	True	Fals		False	
22	False	False	False	Fals	se	False	
23	False	False	False	Fals	se	False	
24	False	False	False	Fals	se	False	
25	False	False	False	Fals	se	False	
26	False	False	False	Fals	se	False	
27	True	False	False	Fals	se	False	
	CITY_Distrito Federal	. CITY_Hamburg	CITY_Hev	verlee CITY	/_Kista \	\	
0	False	_		False	False		
1	False	False		False	False		
2	False			False	True		
3	False			False	False		
4	False			False	False		
5	False			False	False		
6	False			False	False		
7	False			False	False		
8	False			False	False		
9	False			False	False		
10	True			False	False		
11	False			False	False		
12	False			False	False		
13	False			False	False		
14							
	False			False	False		
15	False			False	False		
16	False			False	False		
17	False			False	False		
18	False			False	False		
19	False			False	False		
20	False			False	False		
21	False			False	False		
22	False			False	False		
23	False	False		True	False		
24	False	False		False	False		
25	False	False		False	False		
26	False	False		False	False		
27	False	False		False	False		
	CITY_Kuopio REGIO	N_Ontario REG	ION_Osaka	REGION_SP	REGION_T	Γaipei ∖	\
0	False	False	False	False		False	
1	False	False	False	False		False	
2	False	False	False	False		False	

3	False	•••	False	False	False	False	
4	False	•••	True	False	False	False	
5	False	•••	False	False	False	False	
6	False	•••	False	False	False	False	
7	False	•••	False	False	False	False	
8	False	•••	False	False	False	False	
9	False	•••	False	False	False	False	
10	False	•••	False	False	False	False	
11	False	•••	False	False	False	False	
12	False	•••	False	True	False	False	
13	False	•••	False	False	False	False	
14	False	•••	False	False	False	False	
15	False	•••	False	False	True	False	
16	True	•••	False	False	False	False	
17	False	•••	False	False	False	False	
18	False	•••	False	False	False	True	
19	False			False	False	False	
20	False			False	False	False	
21	False	•••	False	False	False	False	
22	False			False	False	False	
23	False			False	False	False	
24	False	•••	False	False	False	False	
25	False			False	False	False	
26	False			False	False	False	
27	False			False	False	False	
	REGION_Tokyo	REGION_VIC	REGION_Vizcay	a REGION_	Washington	\	
0	False	False	Fals	е	False		
1	False	False	Fals	е	False		
2	False	False	Fals	е	False		
3	False	False	Fals	е	False		
4	False	False	Fals	е	False		
5	False	False	Fals	е	False		
6	False	False	Fals	е	True		
7	False	False	Fals	е	False		
8	False	False	Fals	е	False		
9	False	False	Fals	е	False		
10	False	False	Fals	е	False		
11	True	False	Fals	е	False		
12	False	False	Fals	е	False		
10	Folgo	Ттио	Fals	0	False		
13	False	True	raib	6			
14	False	False	Tru		False		
				е			
14	False	False	Tru	e e	False		
14 15	False False	False False	Tru Fals	e e e	False False		
14 15 16	False False False	False False False	Tru Fals Fals	e e e	False False False		

False

19

False

False

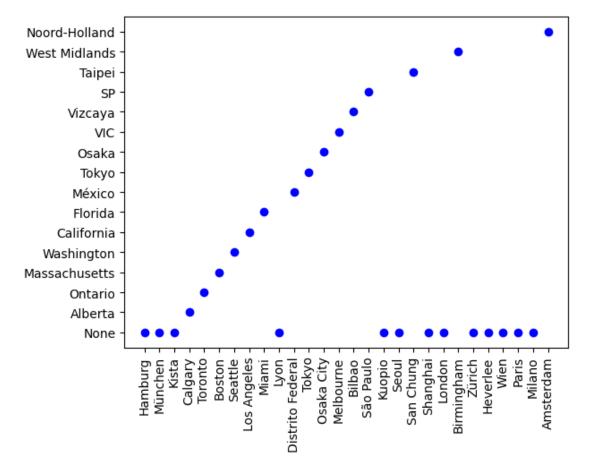
False

20	False	False	False	False
21	False	False	False	False
22	False	False	False	False
23	False	False	False	False
24	False	False	False	False
25	False	False	False	False
26	False	False	False	False
27	False	False	False	False

	REGION_West	Midlanda	Centrum
0	ITEGION_West	False	1.0
1		False	1.0
2		False	1.0
3		False	1.0
4		False	2.0
5		False	1.0
6		False	1.0
7		False	1.0
8		False	1.0
9		False	1.0
10		False	0.0
11		False	
			1.0
12		False	1.0
13		False	1.0
14		False	1.0
15		False	3.0
16		False	1.0
17		False	1.0
18		False	1.0
19		False	1.0
20		False -	1.0
21		True	1.0
22		False	1.0
23		False	1.0
24		False	1.0
25		False	1.0
26		False	1.0
27		False	4.0

[28 rows x 44 columns]

De resultaten worden gevisualiseerd door een scatterplot te maken van de kwantiteit versus de eenheidsprijs, waarbij de punten zijn gekleurd op basis van hun toegewezen cluster.



De centra van de clusters worden geëxtraheerd en weergegeven.

```
17
1
2
            3
3
            1
4
5
            1
6
            1
7
            1
8
            1
9
            1
```

# 2.2 Clusteringmodel bouwen met meer dan 2 dimensies (alle kolommen uit de dataset)

Nu gaan we hetzelfde doen als hierboven, maar dan met alle kolommen uit de dataset. En misschien ook verder testen met verschillende k's.

```
[]: kmeans = KMeans(n_clusters = 5, random_state = 42)
prediction_results = kmeans.fit_predict(df)
prediction_results
```

```
[]: array([3, 2, 2, 1, 1, 3, 4, 4, 3, 2, 0, 3, 3, 3, 1, 3, 2, 3, 3, 3, 3, 3, 3, 3, 3, 4])
```

```
[]: df['Centrum'] = prediction_results
df
```

[]:	CITY_Amsterdam	CITY_Bilbao	CITY_Birmingham	CITY_Boston	CITY_Calgary	\
0	False	False	False	False	False	
1	False	False	False	False	False	
2	False	False	False	False	False	
3	False	False	False	False	True	
4	False	False	False	False	False	
5	False	False	False	True	False	
6	False	False	False	False	False	
7	False	False	False	False	False	
8	False	False	False	False	False	
9	False	False	False	False	False	
10	False	False	False	False	False	
11	False	False	False	False	False	
12	False	False	False	False	False	
13	False	False	False	False	False	
14	False	True	False	False	False	
15	False	False	False	False	False	
16	False	False	False	False	False	
17	False	False	False	False	False	
18	False	False	False	False	False	
19	False	False	False	False	False	
20	False	False	False	False	False	

21	False	False	True	False	False
22	False	False	False	False	False
23	False	False	False	False	False
24	False	False	False	False	False
25	False	False	False	False	False
26	False	False	False	False	False
27	True	False	False	False	
	CITY_Distrito Federa		-		
0	Fals				False
1	Fals				False
2	Fals			False	True
3	Fals				False
4	Fals				False
5	Fals			False	False
6	Fals	e Fal	se	False	False
7	Fals	e Fal	se	False	False
8	Fals	e Fal	.se	False	False
9	Fals	e Fal	.se	False	False
10	Tru	e Fal	.se	False	False
11	Fals	e Fal	.se	False	False
12	Fals	e Fal	.se	False	False
13	Fals	e Fal	.se	False	False
14	Fals	e Fal	.se	False	False
15	Fals	e Fal	.se	False	False
16	Fals	e Fal	.se	False	False
17	Fals	e Fal	.se	False	False
18	Fals	e Fal	.se	False	False
19	Fals				False
20	Fals				False
21	Fals				False
22	Fals				False
23	Fals				False
24	Fals				False
25	Fals				False
26	Fals				False
27	Fals				False
_		ON_Ontario R	<del>-</del>	_	REGION_Taipei \
0	False	False	False	False	False
1	False	False	False	False	False
2	False	False	False	False	False
3	False	False	False	False	False
4	False	True	False	False	False
5	False	False	False	False	False
6	False	False	False	False	False
7	False	False	False	False	False

8	False	•••	False F	alse	False		False
9	False	•••	False F	alse	False		False
10	False	•••	False F	alse	False		False
11	False	•••		alse	False		False
12	False	•••		True	False		False
13	False			alse	False		False
		•••					
14	False	•••		alse	False		False
15	False	•••		alse	True		False
16	True	•••		alse	False		False
17	False	•••		alse	False		False
18	False	•••	False F	alse	False		True
19	False	•••	False F	alse	False		False
20	False	•••	False F	alse	False		False
21	False	***	False F	alse	False		False
22	False	•••	False F	alse	False		False
23	False	•••	False F	alse	False		False
24	False	•••		alse	False		False
25	False	•••		alse	False		False
26	False	•••		alse	False		False
27	False	•••		alse	False		False
21	1 4156	•••	raise r	arse	1 0156		Tarbe
	DECTON Telesco	DECTON VIC	DECTON Wi	DECTO		\	
^	REGION_Tokyo		REGION_Vizcaya		W_Washington	\	
0	False	False	False		False		
1	False	False	False		False		
2	False	False	False		False		
3	False	False	False		False		
4	False	False	False		False		
5	False	False	False		False		
6	False	False	False		True		
7	False	False	False		False		
8	False	False	False		False		
9	False	False	False		False		
10	False	False	False		False		
11	True	False	False		False		
12	False	False	False		False		
13	False	True	False		False		
14	False	False	True		False		
15	False	False	False		False		
16	False	False	False		False		
17	False	False	False		False		
18	False	False	False		False		
19	False	False	False		False		
20	False	False	False		False		
21	False	False	False		False		
22	False	False	False		False		
23	False	False	False		False		
24	False	False	False		False		

	25	False	False	False	False
	26	False	False	False	False
	27	False	False	False	False
		_West Midlan			
	0	Fal			
	1	Fal			
	2	Fal			
	3	Fal			
	4	Fal			
	5	Fal			
	6	Fal			
	7	Fal			
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	9	Fal			
	10	Fal			
	11	Fal			
	12	Fal			
	13	Fal			
	14	Fal			
	15	Fal			
	16	Fal			
	17	Fal			
	18	Fal			
	19	Fal			
	20	Fal			
	21	Tr			
	22	Fal			
	23	Fal			
	24	Fal			
	25	Fal			
	26	Fal			
	27	Fal	se 4		
	[28 rows x	44 columns]			
[]:	df.groupby	('Centrum',	as_index = False	e)['Centrum'].count(	)
[]:	Centrum				
	0 1				

## 2.3 Evaluatie van de clustering

Hier gaan we de inter- en intraclusterafstand berekenen voor verschillende k's.

```
[]: from typing import Literal, Any
     intercluster_distance: Literal[0] = 0
     intracluster_distance: Literal[0] = 0
     common_columns: Any = df.columns.intersection(kmeans_centra.columns)
     for centrumindex, _ in kmeans_centra[common_columns].iterrows():
         for src_index, _ in df[common_columns].iterrows():
             if df.at[src index, "Centrum"] == centrumindex:
                 diff = df.loc[src_index, common_columns] - kmeans_centra.
      →loc[centrumindex, common_columns]
                 distance = np.linalg.norm(diff[pd.to_numeric(diff, errors="coerce").
      →notnull()])
                 intracluster_distance += distance
             else:
                 diff = df.loc[src_index, common_columns] - kmeans_centra.
      →loc[centrumindex, common_columns]
                 distance = np.linalg.norm(diff[pd.to_numeric(diff, errors="coerce").
      →notnull()])
                 intercluster_distance += distance
     print(f"Intercluster distance (more is better): {intercluster_distance}")
     print(f"Intracluster distance (less is better): {intracluster_distance}")
```

Intercluster distance (more is better): 191.71914756021337 Intracluster distance (less is better): 44.08098273770318

Nu voeren we deze analyse uit om het optimale aantal clusters (k) voor K-Means-clustering te bepalen met behulp van de elleboogmethode. Hierdoor kunnen we de inter- en intraclusterafstand optimaal berekenen voor verschillende k's.

```
intercluster_distances: list = []
intracluster_distances: list = []
k_options = range(1, 11)

for k in k_options:
    kmeans: KMeans = KMeans(n_clusters=k, random_state=42)
    df["Centrum"] = kmeans.fit_predict(df)
    kmeans_center = pd.DataFrame(kmeans.cluster_centers_, columns=df.columns)

intercluster_distance: Literal[0] = 0
    intracluster_distance: Literal[0] = 0

common_columns: Any = df.columns.intersection(kmeans_center.columns)

for centrumindex, _ in kmeans_center[common_columns].iterrows():
    for src_index, _ in df[common_columns].iterrows():
    if df.at[src_index, "Centrum"] == centrumindex:
```

```
diff = df.loc[src_index, common_columns] - kmeans_center.
 →loc[centrumindex, common_columns]
                distance = np.linalg.norm(diff[pd.to_numeric(diff,__
 ⇔errors="coerce").notnull()])
                intracluster_distance += distance
            else:
                diff = df.loc[src_index, common_columns] - kmeans_center.
 →loc[centrumindex, common_columns]
                distance = np.linalg.norm(diff[pd.to_numeric(diff,__
 ⇔errors="coerce").notnull()])
                intercluster_distance += distance
    intercluster_distances.append(intercluster_distance)
    intracluster_distances.append(intracluster_distance)
plt.plot(k_options, intercluster_distances, marker="o", label="Intercluster_⊔

¬afstand", color="g")
plt.plot(k_options, intracluster_distances, marker="x", label="Intracluster_
 ⇔afstand", color="b")
plt.xlabel("Hoeveelheid van k-clusters")
plt.ylabel("Cluster afstand")
plt.title("Inter- en Intracluster afstand")
plt.legend()
plt.show()
```

