

# clusteringmodel

April 18, 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 inter- en intracusterafstand.

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 \
0          1         3                                Braund; Mr. Owen Harris
1          2         1  Cumings; Mrs. John Bradley (Florence Briggs Th...
2          3         3                                Heikkinen; Miss. Laina
3          4         1          Futrelle; Mrs. Jacques Heath (Lily May Peel)
4          5         3                                Allen; Mr. William Henry
..          ...      ...                                ...
886        887        2                                Montvila; Rev. Juozas
887        888        1                                Graham; Miss. Margaret Edith
888        889        3          Johnston; Miss. Catherine Helen "Carrie"
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
1  female     1     0        PC 17599  712.833   C85        C         1
2  female     0     0  STON/O2. 3101282    7.925   NaN        S         1
3  female     1     0        113803    53.1   C123        S         1
4    male     0     0        373450    8.05   NaN        S         0
..      ...    ...    ...            ...      ...    ...      ...      ...
886   male     0     0        211536     13   NaN        S         0
887  female     0     0        112053     30   B42        S         1
888  female     1     2        W./C. 6607    23.45   NaN        S         0
889   male     0     0        111369     30   C148        C         1
890   male     0     0        370376     7.75   NaN        Q         0

      Age
0     22
1     38
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
0         3  male   22         0
1         1 female   38         1
```

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

[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
Age           int64
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
0          False      True     False     False     True
1           True     False      True     False     False
2           True     False     False     False     True
3           True     False      True     False     False
4          False      True     False     False     True
..          ...      ...      ...      ...      ...
886         False      True     False      True     False
887          True     False      True     False     False
888          True     False     False     False     True
889         False      True      True     False     False
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',
↪ 'Age', 'Survived']]
df
```

```
[ ]:      Pclass_1 Pclass_2 Pclass_3 Sex_female 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
```

[891 rows x 7 columns]

## 1.4 Clusteringmodel bouwen met 2 dimensies

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

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

[891 rows x 2 columns]

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

```
[ ]: array([0, 2, 2, 2, 2, 2, 1, 0, 2, 0, 0, 1, 0, 2, 0, 1, 0, 2, 2, 2, 2, 2,
0, 2, 0, 2, 2, 0, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,
0, 2, 2, 2, 2, 0, 0, 0, 1, 2, 1, 2, 0, 2, 0, 0, 0, 2, 1, 0, 2, 2,
2, 0, 0, 2, 2, 0, 0, 2, 2, 2, 2, 2, 1, 2, 0, 2, 2, 2, 0, 2, 0, 2,
0, 2, 2, 0, 1, 2, 1, 2, 1, 0, 2, 2, 2, 2, 0, 2, 2, 2, 0, 2, 2, 2,
1, 0, 0, 0, 0, 0, 1, 2, 2, 0, 0, 1, 2, 2, 1, 0, 2, 2, 2, 1, 2, 0,
1, 2, 2, 0, 0, 2, 0, 2, 2, 0, 2, 0, 0, 0, 2, 0, 2, 2, 1, 0, 1, 2,
0, 1, 0, 2, 0, 0, 1, 2, 2, 0, 0, 0, 0, 1, 0, 2, 1, 0, 0, 0, 1, 0,
0, 1, 2, 2, 0, 0, 0, 0, 0, 0, 1, 2, 2, 2, 0, 0, 0, 1, 1, 0, 2,
```

```

0, 2, 2, 0, 2, 1, 0, 0, 2, 2, 0, 2, 2, 2, 0, 2, 2, 2, 2, 2, 2, 2,
0, 2, 1, 2, 2, 0, 0, 0, 0, 2, 2, 2, 1, 0, 2, 2, 1, 0, 0, 2, 2, 2,
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, 2, 1, 1, 2, 0, 2, 1, 2, 0, 0, 2, 2,
2, 0, 2, 0, 2, 0, 2, 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, 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, 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, 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, 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, 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, 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, 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] -
            ↪ kmeans_centra.at[centrumindex, 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('-----')

    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}
0
=====
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}
2
=====
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}  
2  
=====

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}  
2  
=====

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}  
2  
=====



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}

2

=====

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}

1

=====

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}  
0

=====

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}  
2

=====

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

-----  
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}
0
=====
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}
0
=====
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}
1
=====
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}
0
=====
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}
2
=====
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}
0
=====
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}

```

1

=====

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}

0

=====

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}

2

=====

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}
2
=====
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}
2
=====
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}
2
=====
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}  
0

---

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}  
2

---

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

---

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}
0
=====
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}
2
=====
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}  
2  
=====

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}  
0  
=====

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}  
2  
=====

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}

2

=====

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}

2

=====

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}

2

=====

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}

2

=====

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

---

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 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}
2
=====
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}
2
=====
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}
2
=====
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}
2
=====
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}
2
=====
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}

```



2

=====

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}

2

=====

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}

2

=====

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}
2
=====
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}
0
=====
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}
2
=====
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}  
2

---

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}  
2

---

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

---

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 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}
0
=====
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}  
0

=====

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}  
0

=====

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}  
1

=====

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}

2

=====

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}

1

=====

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}

2

=====

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}

0

=====

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}
2
=====
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}
0
=====
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}
0
=====
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}
0
=====
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}
1
=====
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}

```

0

=====

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}

2

=====

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}

2

=====

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}
0
=====
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}
0
=====
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}
2
=====
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}  
2

=====

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}  
0

=====

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

-----  
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}
0
=====
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}
2
=====
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}

2

=====

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}

2

=====

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}

2

=====

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}

2

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}

1

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}  
2

=====

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}  
0

=====

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}
2
=====
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}
2
=====
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}
2
=====
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}
0
=====
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}
2
=====
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}
0
=====
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}

```

2

=====

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}

0

=====

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}

2

=====

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}
0
=====
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}
1
=====
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}
2
=====
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}

1

=====

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}

2

=====

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  
-----

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}
1
=====
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}
0
=====
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}  
2  
=====

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}  
2  
=====

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}  
2  
=====

```

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}
2
=====
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}
0
=====
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}  
2

=====

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}  
2

=====

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

---

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}
2
=====
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}
0
=====
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}
2
=====
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}
2
=====
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}
2
=====
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}
1
=====
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}

```

0

=====

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}

0

=====

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}

0

=====

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}
0
=====
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}
0
=====
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}
1
=====
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}
2
=====
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}
2
=====
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}
0
=====
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
-----
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}
0
=====
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}
1
=====
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}  
2  
=====

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}  
2  
=====

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}  
1  
=====

```

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}
0
=====
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}
2
=====
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}  
2

=====

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}  
2

=====

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

-----  
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 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}
2
=====
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}
0
=====
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}
1
=====
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}
2
=====
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}
2
=====
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}

```

0

=====

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}

0

=====

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}
0
=====
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}
2
=====
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}
2
=====
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}
0
=====
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}
2
=====
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}
0
=====
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}
0
=====
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}
0
=====
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: 27.164344449496999, 2: 4.67079700641389}  
2  
=====

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}  
0  
=====

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}  
2  
=====

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}

2

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}

1

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}

0

=====

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}

1

=====

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}
2
=====
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}
0
=====
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}
1
=====
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}
0
=====
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}
2
=====
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}
0
=====
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}

```

0

=====

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}

1

=====

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}

2

=====

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}
0
=====
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}
0
=====
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}
0
=====
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}
0
=====
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}
1
=====
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}
0
=====
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}
2
=====
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}  
1

=====

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}  
0

=====

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}  
0

=====

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}

0

=====

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}

1

=====

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}  
0

=====

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}  
0

=====

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

---

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}
1
=====
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}
2
=====
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}
2
=====
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}
0
=====
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}
0
=====
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}
0
=====
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}

```

0

=====

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}

0

=====

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

-----

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

0

=====

Afstand van bronindex 186 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}  
 0

=====  
 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}  
 1

=====  
 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}
2
=====
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}
2
=====
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}
2
=====
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}
0
=====
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
-----
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}
0
=====
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}
0
=====
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}  
1  
=====

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}  
1  
=====

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}  
0  
=====



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}

2

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}

0

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}  
2

=====

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}  
2

=====

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}
0
=====
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}
2
=====
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}
1
=====
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}
0
=====
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}
0
=====
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}
2
=====
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}

```

2

=====

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}

0

=====

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}

2

=====

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}
2
=====
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}
0
=====
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}
2
=====
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}
2
=====
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}
2
=====
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}
2
=====
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}
2
=====
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}

2

=====

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}

2

=====

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}

0

=====

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}

2

=====

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}

1

=====

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}

2

=====

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}

2

=====

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}
0
=====
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}
0
=====
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}
0
=====
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}
0
=====
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}
2
=====
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}
2
=====
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}

```



2

=====

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}

1

=====

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}

0

=====

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}
2
=====
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}
1
=====
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}
0
=====
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}  
0

=====

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}  
2

=====

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

-----  
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}
2
=====
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}
2
=====
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}  
2  
=====

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: 92.9437956551712

Euclidische afstand: 9.640736261070371  
-----

{0: 6.0195060939616125, 1: 32.15863973393867, 2: 9.640736261070371}  
0  
=====

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}  
2  
=====

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}

1

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}

2

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}

2

=====

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}

2

=====

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

---

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 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}
2
=====
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}
2
=====
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}
1
=====
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}
2
=====
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}
2
=====
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}

```

2

=====

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}

2

=====

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}

2

=====

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}

1

=====

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}
2
=====
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}
0
=====
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}

1

=====

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}

2

=====

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}
2
=====
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}
2
=====
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}
0
=====
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}
2
=====
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}
1
=====

```

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}

2

=====

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}

2

=====

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}  
2

=====

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}  
2

=====

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}
2
=====
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}
2
=====
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}
1
=====
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}
1
=====
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}
2
=====
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}
0
=====
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}

```

2

=====

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}

1

=====

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}

2

=====

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}
0
=====
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}
0
=====
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}
2
=====
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}
2
=====
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}  
2

---

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: 92.9437956551712  
Euclidische afstand: 9.640736261070371

---

{0: 6.0195060939616125, 1: 32.15863973393867, 2: 9.640736261070371}  
0

---

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}
2
=====
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}
0
=====
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}
2
=====
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}
0
=====
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}
2
=====

```

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}

2

=====

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}

2

=====

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}  
2

=====

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}  
0

=====

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}
0
=====
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}
1
=====
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}
1
=====
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}
1
=====
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}
1
=====
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}
0
=====
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}

```

1

=====

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}

1

=====

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}

1

=====

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}  
 1

=====  
 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}  
 0

=====  
 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}
2
=====
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}
2
=====
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}
2
=====
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}
0
=====
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}
2
=====
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}
2
=====
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}

1

=====

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}

2

=====

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}

2

=====

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}

1

=====

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}

2

=====

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}  
2

=====

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: 92.9437956551712  
Euclidische afstand: 9.640736261070371

-----  
{0: 6.0195060939616125, 1: 32.15863973393867, 2: 9.640736261070371}  
0

=====

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}
2
=====
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}
2
=====
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}
0
=====
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}
1
=====
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}
2
=====
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}
1
=====
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}

```

2

=====

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}

2

=====

Afstand van bronindex 329 tot...

Centrumindex 0:

$$16 - 15.992481203007529 = 0.007518796992471266$$

$$1 - 0.3796992481203007 = 0.6203007518796992$$

Totale euclidische som: 0.384829550907342

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}

0

=====

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}  
 1

=====  
 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}  
 1

=====  
 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}
2
=====
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}
0
=====
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}
1
=====
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}
2
=====
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}
2
=====
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}

1

=====

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}

1

=====

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}

0

=====

```

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}
2
=====
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}
2
=====
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}  
2

=====

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}  
2

=====

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

-----  
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 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}
2
=====
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}
1
=====
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}
0
=====
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}
2
=====
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}
0
=====
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}

```

1

```
=====
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}
0
```

```
=====
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}
2
```

```
=====
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}
1
=====
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}
2
=====
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}
0
=====
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}
2
=====
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}  
1

=====

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}
2
=====
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}
2
=====
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}

1

=====

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}

2

=====

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}

1

```

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}
2
=====
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}
1
=====
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}

1

=====

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}

1

=====

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}
2
=====
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}
2
=====
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}
0
=====
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}
0
=====
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}
0
=====
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}
0
=====
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}

```

1

=====

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}

0

=====

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}

2

=====

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}
0
=====
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}
0
=====
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}
2
=====
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}
0
=====
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}  
2

=====

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}  
2

=====

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}
1
=====
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}
0
=====
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}  
0

=====

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}  
2

=====

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}  
1

=====



```

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}
0
=====
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}
2
=====
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}  
0

=====

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}  
2

=====

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

---

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}
0
=====
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}
2
=====
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}
0
=====
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}
2
=====
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}
1
=====
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}
0
=====
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}

```

2

=====

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}

2

=====

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}

2

=====

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}

0

=====

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}

2

=====

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}
0
=====
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}
2
=====
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}
1
=====
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}
0
=====
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}
0
=====
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}
1
=====
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}

1

=====

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}

1

=====

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}

2

=====

```

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}
1
=====
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}
1
=====
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}

1

=====

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}

2

=====

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

---

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}
0
=====
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}
2
=====
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}
0
=====
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}
1
=====
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}
0
=====
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}
2
=====
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}

```



2

=====

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}

0

=====

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}

1

=====

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}
0
=====
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}
1
=====
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}
2
=====
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}  
2

=====

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}  
1

=====

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}
2
=====
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}
0
=====
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}  
1  
=====

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}  
0  
=====

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}  
0  
=====

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}

2

=====

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}

1

=====

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}  
2

=====

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}  
1

=====

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

-----  
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}
0
=====
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}
2
=====
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}
2
=====
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}
1
=====
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}
0
=====
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}
0
=====
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}

```

2

```
=====
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}
0
```

```
=====
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}
1
```

```
=====
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}
1
=====
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}
2
=====
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}
1
=====
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}

1

=====

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}

2

=====

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}
1
=====
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}
1
=====
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}

1

=====

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}

1

=====

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}

1

=====

```

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}
2
=====
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}
1
=====
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}

1

=====

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}

1

=====

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}
2
=====
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}
1
=====
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}
1
=====
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}
1
=====
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}
1
=====
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}
2
=====
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}

```

2

=====

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}

2

=====

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}

0

=====

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}
0
=====
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}
2
=====
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}
2
=====
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}
2
=====
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}
0
=====
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}
0
=====
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}
0
=====
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}
2
=====
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}

1

=====

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}

1

=====

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}

2

=====

```

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}
2
=====
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}
2
=====
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}  
1

=====

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}  
2

=====

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}
0
=====
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}
2
=====
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}
0
=====
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}
1
=====
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}
1
=====
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}
0
=====
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}

```

2

=====

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}

1

=====

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}

2

=====

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}  
 2

=====  
 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}
0
=====
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}
0
=====
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}
2
=====
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}
2
=====
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}
0
=====
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}
0
=====
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}
2
=====
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}
2
=====
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}
2
=====

```

```

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}
2
=====
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}
2
=====
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}  
2

=====

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}  
2

=====

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}
1
=====
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}
2
=====
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}
1
=====
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}
2
=====
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}
2
=====
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}
2
=====
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}

```

2

=====

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}

2

=====

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}

0

=====

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}
1
=====
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}
2
=====
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}
2
=====
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}
1
=====
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}
1
=====
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}
2
=====
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}
0
=====
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}
0
=====
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}
1
=====
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}
0
=====

```

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}

1

=====

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}

2

=====

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}  
0

=====

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}  
1

=====

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}
2
=====
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}
1
=====
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}
0
=====
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}
2
=====
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}
0
=====
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}
0
=====
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}

```

2

```
=====
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}
1
```

```
=====
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}
1
```

```
=====
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}
0
=====
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}
1
=====
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}
2
=====
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}
0
=====
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}
0
=====
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}
2
=====
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}
1
=====
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}
0
=====
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}  
0

=====

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}  
1

=====

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}  
1

=====

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}

1

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}

2

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}  
2

=====

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}  
1

=====

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

-----  
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}
2
=====
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}
2
=====
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}
1
=====
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}
1
=====
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}
2
=====
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}
0
=====
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}

```

2

=====

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}

1

=====

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}

2

=====

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}
1
=====
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}
1
=====
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}
2
=====
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}
1
=====
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}
0
=====
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}
0
=====
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}
2
=====
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}
2
=====
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}

1

=====

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}

2

=====

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}

2

=====



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}

2

=====

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}

1

=====

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}  
2

=====

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}  
1

=====

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

-----  
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}
0
=====
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}
1
=====
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}
1
=====
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}
0
=====
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}
1
=====
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}
2
=====
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}

```

1

=====

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}

1

=====

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}

1

=====

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}  
 2

=====  
 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}
1
=====
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}
1
=====
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}  
1

---

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}  
1

---

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}
2
=====
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}
1
=====
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}  
1  
=====

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}  
1  
=====

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}  
2  
=====

```

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}
2
=====
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}
2
=====
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}

2

=====

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}

0

=====

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}
2
=====
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}
2
=====
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}
1
=====
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}
1
=====
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}
1
=====
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}
2
=====
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}

```



2

=====

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}

2

=====

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}

2

=====

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}
0
=====
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}
2
=====
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}
2
=====
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}
2
=====
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}  
0

=====

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}  
0

=====

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}
0
=====
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}
1
=====
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}

1

=====

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}

0

=====

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}

2

=====

```

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}
1
=====
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}
1
=====
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}  
1

=====

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}  
2

=====

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

---

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 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}
0
=====
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}
2
=====
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}
2
=====
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}
2
=====
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}
2
=====
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}

0

=====

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}

2

=====

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}
0
=====
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}
1
=====
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}
1
=====
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}
1
=====
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}
0
=====
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}
1
=====
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
-----
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}
0
=====
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}
0
=====
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}  
0

=====

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}  
0

=====

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}  
0

=====

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}

0

=====

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}

0

=====

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}  
2

=====

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}  
0

=====

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

-----  
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}
2
=====
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}
0
=====
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}
1
=====
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}
1
=====
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}
2
=====
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}
1
=====
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}

```

2

=====

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}

0

=====

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}

2

=====

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}
0
=====
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}
1
=====
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}
0
=====
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}  
2

=====

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}  
2

=====

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}
1
=====
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}
2
=====
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}  
0

=====

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}  
0

=====

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}  
2

=====

```

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}
0
=====
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}
1
=====
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}

2

=====

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}

2

=====

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

---

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}
2
=====
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}
0
=====
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}
0
=====
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}
1
=====
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}
2
=====
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}
0
=====
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}

```

0

=====

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}

0

=====

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}

0

=====

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}
0
=====
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}
2
=====
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}
2
=====
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}  
1

---

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}
1
=====
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}
2
=====
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}

1

=====

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}

2

=====

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}

0

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}

2

=====

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}

0

=====

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}  
2

=====

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}  
2

=====

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}
2
=====
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}
1
=====
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}
2
=====
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}
0
=====
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}
2
=====
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}
2
=====
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}

```

2

=====

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}

1

=====

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}

2

=====

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}
1
=====
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}
0
=====
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}
2
=====
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}
2
=====
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}
2
=====
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}
2
=====
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
-----
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}
0
=====
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}
0
=====
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}
2
=====
```

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}
1
=====
```

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}
2
=====
```

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}

0

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}

2

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}  
2

=====

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}  
2

=====

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

---

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 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}
2
=====
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}
0
=====
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}
2
=====
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}
0
=====
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}
0
=====
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}

```

2

=====

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}

1

=====

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}

2

=====

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}
1
=====
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}
1
=====
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}
1
=====
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}
2
=====
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}
0
=====
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}
2
=====
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
-----
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 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}
1
=====
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}  
0  
=====

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}  
2  
=====

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}  
0  
=====

```

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}
2
=====
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}
0
=====
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}

0

=====

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}

2

=====

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}
0
=====
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}
1
=====
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}
1
=====
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}
2
=====
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}
0
=====
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}
2
=====
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}

```

2

=====

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}

1

=====

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}

2

=====

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}
0
=====
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}
2
=====
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}
0
=====
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}
1
=====
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}

1

=====

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}

2

=====

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}
1
=====
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}
2
=====
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}  
2  
=====

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}  
1  
=====

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}  
1  
=====



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}

1

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}

1

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}  
0

=====

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}  
1

=====

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}
0
=====
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}
1
=====
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}
1
=====
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}
0
=====
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}
0
=====
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}
2
=====
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}

2

=====

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}

2

=====

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}
0
=====
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}
0
=====
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}
0
=====
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}
1
=====
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}
1
=====
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}
0
=====
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}
1
=====
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}
1
=====
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}

2

=====

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}

2

=====

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}

1

```

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}
2
=====
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}
2
=====
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}  
2

=====

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}  
2

=====

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}
2
=====
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}
0
=====
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}
2
=====
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}
2
=====
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}
2
=====
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}
2
=====
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}

```



0

=====

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}

2

=====

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}

2

=====

Afstand van bronindex 810 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 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}  
 2

=====  
 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}
2
=====
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}
0
=====
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}
2
=====
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}
1
=====
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}
0
=====
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}
2
=====
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}  
1  
=====

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}  
0  
=====

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}  
1  
=====

```

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}
2
=====
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}
2
=====
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}

2

=====

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}

0

=====

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}
1
=====
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}
1
=====
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}
0
=====
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}
1
=====
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}
1
=====
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}
0
=====
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}

```

1

```
=====
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}
0
```

```
=====
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}
0
```

```
=====
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}
0
=====
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}
2
=====
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}
0
=====
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}
0
=====
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}  
2

=====

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}  
0

=====

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

-----  
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}
0
=====
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}
0
=====
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}  
2  
=====

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}  
2  
=====

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}  
0  
=====

```

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}
2
=====
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}
0
=====
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}

2

=====

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}

2

=====

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}
0
=====
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}
0
=====
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}
1
=====
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}
0
=====
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}
0
=====
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}
1
=====
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}

```

0

=====

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}

1

=====

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}

1

=====

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}
0
=====
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}
2
=====
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}
0
=====
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}

1

=====

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}

0

=====

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}
2
=====
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}
2
=====
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}  
2  
=====

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}  
2  
=====

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}  
0  
=====

```

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}
0
=====
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}
2
=====
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}  
1

=====

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}  
2

=====

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

---

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}
1
=====
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}
2
=====
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}
0
=====
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}
0
=====
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}
0
=====
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}
0
=====
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}

```

1

=====

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}

2

=====

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}

2

=====

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}
0
=====
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}
2
=====
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}
2
=====
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}
2
=====
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}
2
=====
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}
0
=====
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
-----
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}
0
=====
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}
2
=====
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

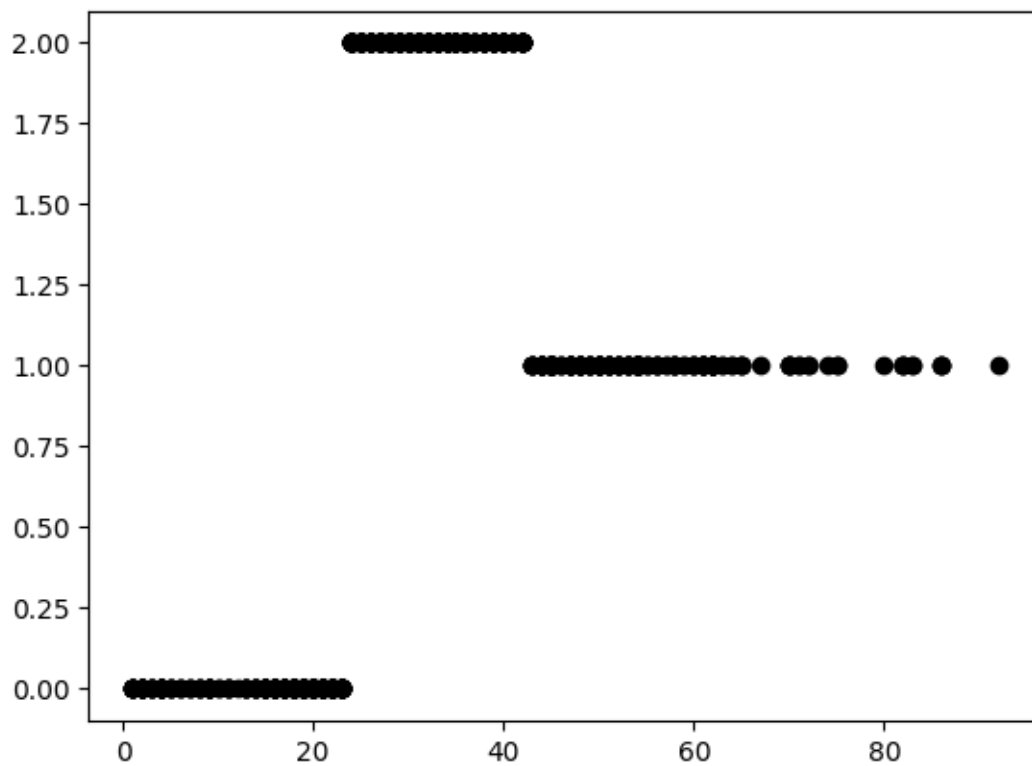
```

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

```
[ ]:      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]

```
[ ]: plt.scatter(df_2d['Age'], df_2d['Centrum'], color = 'k')
plt.show()
```



```
[ ]: 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, 4, 1, 2, 0, 2, 2, 2, 2, 2, 2, 2, 2, 2, 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, 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, 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, 2,
           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, 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, 0,
           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, 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, 0, 1, 2, 2, 0, 4, 2, 1, 2, 1, 2, 0, 0, 0, 0, 5,
0, 2, 0, 2, 0, 1, 2, 0, 0, 2, 2])
```

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

```
[ ]:
   Pclass_1 Pclass_2 Pclass_3 Sex_female 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.drop(["ADDRESS1", "ADDRESS2", "POSTAL_ZONE"], axis=1)
```

[ ]:	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	6	Paris	None	1
26	7	Milano	None	6
27	9	Amsterdam	Noord-Holland	7

Nu gaan we data mergen. Orders worden samengevoegd met details om een compleet beeld van de bestellingen te krijgen.

Productinformatie wordt geladen en samengevoegd om een lookup-tabel te maken voor productnummers naar productcategorieën.

Verkoopgegevens worden voorbereid, zoals de omzet- en afzetgegevens per verkoopfiliaal en de verhouding van de verkoop per productlijn.

Bij de productlijn wordt ook dummy encoding toegepast.

We zullen later de branches dummies geven.

```
[ ]: order_full = pd.merge(order_details, orders_header, on='ORDER_NUMBER')
order_full['UNIT_SALE_PRICE'] = order_full['UNIT_SALE_PRICE'].astype(float)
order_full['UNIT_PRICE'] = order_full['UNIT_PRICE'].astype(float)
order_full['UNIT_COST'] = order_full['UNIT_COST'].astype(float)

# Lees productstabellen
product = pd.read_sql_query("SELECT * FROM product;", conn_sales)
product_type = pd.read_sql_query("SELECT * FROM product_type;", conn_sales)
product_line = pd.read_sql_query("SELECT * FROM product_line;", conn_sales)
```

```

# Maak lookuptabel voor productnumber -> naam productscategorie
product_line_lookup = pd.merge(product, product_type, on='PRODUCT_TYPE_CODE')
product_line_lookup = pd.merge(product_line_lookup, product_line,
    ↳on='PRODUCT_LINE_CODE')
product_line_lookup = product_line_lookup.loc[:,['PRODUCT_NUMBER',
    ↳'PRODUCT_LINE_EN']]

# Maak dummies van product_line
product_line_dummies = pd.get_dummies(product_line_lookup['PRODUCT_LINE_EN'])

product_line_lookup = product_line_lookup.drop(['PRODUCT_LINE_EN'], axis=1)
product_line_lookup = pd.concat([product_line_dummies, product_line_lookup],
    ↳axis = 1)

# Omzet/Afzetsdata
sales_profit_data = order_full.groupby('SALES_BRANCH_CODE').aggregate('sum') #.
    ↳reset_index()
sales_profit_data = sales_profit_data[['QUANTITY', 'UNIT_COST', 'UNIT_PRICE',
    ↳'UNIT_SALE_PRICE']]

# Productsverkoopdata (Verhouding van verkoop per productlijn)
sales_product_data = pd.merge(order_full, product_line_lookup,
    ↳on='PRODUCT_NUMBER')
sales_product_data = sales_product_data[['SALES_BRANCH_CODE', 'Camping',
    ↳Equipment', 'Golf Equipment', 'Mountaineering Equipment', 'Outdoor',
    ↳Protection', 'Personal Accessories']]
sales_product_data = sales_product_data.groupby('SALES_BRANCH_CODE').
    ↳aggregate(np.mean)

```

## 2.1 Clusteringmodel bouwen met 2 dimensies

Eerst wordt een 2D-dataset gemaakt met hoeveelheid en eenheidsprijs van de verkochte producten.

Waar we ook dummy encoding toepassen.

```

[ ]: table = sales_profit_data[['QUANTITY', 'UNIT_SALE_PRICE']]
df = pd.get_dummies(table) # Dummy encoding

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

```

```

[ ]:

```

	QUANTITY	UNIT_SALE_PRICE	QUANTITY	UNIT_SALE_PRICE
SALES_BRANCH_CODE				
13	102648	188463.46	102648	188463.46
14	116778	206523.20	116778	206523.20
15	158062	517067.65	158062	517067.65

17	73848	88668.11	73848	88668.11
18	171852	324804.56	171852	324804.56
19	88444	321688.92	88444	321688.92
20	76848	342898.94	76848	342898.94
21	83110	403109.89	83110	403109.89
22	33550	168475.23	33550	168475.23
23	65862	195489.13	65862	195489.13
24	62844	225383.89	62844	225383.89
25	19214	114444.77	19214	114444.77
26	44992	175456.95	44992	175456.95
28	66630	189991.35	66630	189991.35
29	75426	211154.37	75426	211154.37
30	97282	81545.55	97282	81545.55
31	56488	165810.09	56488	165810.09
32	36358	133803.80	36358	133803.80
33	41796	130358.39	41796	130358.39
34	41108	123299.60	41108	123299.60
35	87954	266665.35	87954	266665.35
36	86514	221279.16	86514	221279.16
37	67242	216831.04	67242	216831.04
38	49692	179281.69	49692	179281.69
39	74940	261826.18	74940	261826.18
6	89324	171166.01	89324	171166.01
7	115570	339516.33	115570	339516.33
9	130978	402590.49	130978	402590.49

Een k-means clusteringmodel wordt geïntantieerd 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=4, 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
```

```
[ ]:          QUANTITY  UNIT_SALE_PRICE
0    84293.250000    224765.831250
1   117837.714286    378810.968571
2    51601.000000    112020.036667
3    58076.857143    177952.921429
```

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 13 tot...

Centrumindex 0:

102648 - 84293.25 = 18354.75

188463.46 - 224765.83125 = -36302.37125

Totale euclidische som: 1654759005.9353263

Euclidische afstand: 40678.729158312286

-----

Centrumindex 1:

102648 - 117837.71428571429 = -15189.71428571429

188463.46 - 378810.96857142856 = -190347.50857142857

Totale euclidische som: 36462901439.43171

Euclidische afstand: 190952.61569151576

-----

Centrumindex 2:

102648 - 51601.0 = 51047.0

```

188463.46 - 112020.03666666668 = 76443.42333333331
Totale euclidische som: 8449393179.919208
Euclidische afstand: 91920.58082888297
-----
Centrumindex 3:
102648 - 58076.857142857145 = 44571.142857142855
188463.46 - 177952.92142857146 = 10510.538571428537
Totale euclidische som: 2097058196.6533234
Euclidische afstand: 45793.6479945999
-----
{0: 40678.729158312286, 1: 190952.61569151576, 2: 91920.58082888297, 3:
45793.6479945999}
0
=====
Afstand van bronindex 14 tot...
Centrumindex 0:
116778 - 84293.25 = 32484.75
206523.2 - 224765.83125 = -18242.631249999977
Totale euclidische som: 1388052577.4859757
Euclidische afstand: 37256.57764054524
-----
Centrumindex 1:
116778 - 117837.71428571429 = -1059.7142857142899
206523.2 - 378810.96857142856 = -172287.76857142855
Totale euclidische som: 29684198193.68947
Euclidische afstand: 172291.02760645858
-----
Centrumindex 2:
116778 - 51601.0 = 65177.0
206523.2 - 112020.03666666668 = 94503.16333333333
Totale euclidische som: 13178889209.006678
Euclidische afstand: 114799.34324292399
-----
Centrumindex 3:
116778 - 58076.857142857145 = 58701.142857142855
206523.2 - 177952.92142857146 = 28570.278571428556
Totale euclidische som: 4262084990.3837233
Euclidische afstand: 65284.64590073016
-----
{0: 37256.57764054524, 1: 172291.02760645858, 2: 114799.34324292399, 3:
65284.64590073016}
0
=====
Afstand van bronindex 15 tot...
Centrumindex 0:
158062 - 84293.25 = 73768.75
517067.65 - 224765.83125 = 292301.81875000003
Totale euclidische som: 90882181721.12038

```

Euclidische afstand: 301466.717435143

-----  
Centrumindex 1:

158062 - 117837.71428571429 = 40224.28571428571

517067.65 - 378810.96857142856 = 138256.68142857146

Totale euclidische som: 20732903120.86599

Euclidische afstand: 143989.2465459348  
-----

Centrumindex 2:

158062 - 51601.0 = 106461.0

517067.65 - 112020.03666666668 = 405047.61333333334

Totale euclidische som: 175397513588.0295

Euclidische afstand: 418804.8633767635  
-----

Centrumindex 3:

158062 - 58076.857142857145 = 99985.14285714286

517067.65 - 177952.92142857146 = 339114.72857142857

Totale euclidische som: 124995827926.23694

Euclidische afstand: 353547.4903407418  
-----

{0: 301466.717435143, 1: 143989.2465459348, 2: 418804.8633767635, 3:  
353547.4903407418}

1

=====

Afstand van bronindex 17 tot...

Centrumindex 0:

73848 - 84293.25 = -10445.25

88668.11 - 224765.83125 = -136097.72125

Totale euclidische som: 18631692977.005203

Euclidische afstand: 136497.95960747986  
-----

Centrumindex 1:

73848 - 117837.71428571429 = -43989.71428571429

88668.11 - 378810.96857142856 = -290142.8585714286

Totale euclidische som: 86117973342.93878

Euclidische afstand: 293458.63991870946  
-----

Centrumindex 2:

73848 - 51601.0 = 22247.0

88668.11 - 112020.03666666668 = -23351.92666666668

Totale euclidische som: 1040241488.0453784

Euclidische afstand: 32252.77488907549  
-----

Centrumindex 3:

73848 - 58076.857142857145 = 15771.142857142855

88668.11 - 177952.92142857146 = -89284.81142857145

Totale euclidische som: 8220506498.855971

Euclidische afstand: 90667.00887784912



-----  
{0: 136497.95960747986, 1: 293458.63991870946, 2: 32252.77488907549, 3:  
90667.00887784912}

2

=====

Afstand van bronindex 18 tot...

Centrumindex 0:

$171852 - 84293.25 = 87558.75$

$324804.56 - 224765.83125 = 100038.72875000001$

Totale euclidische som: 17674281951.478577

Euclidische afstand: 132944.6574762543

-----

Centrumindex 1:

$171852 - 117837.71428571429 = 54014.28571428571$

$324804.56 - 378810.96857142856 = -54006.40857142856$

Totale euclidische som: 5834235228.008562

Euclidische afstand: 76382.16564099609

-----

Centrumindex 2:

$171852 - 51601.0 = 120251.0$

$324804.56 - 112020.03666666668 = 212784.52333333332$

Totale euclidische som: 59737556371.19387

Euclidische afstand: 244412.67637173377

-----

Centrumindex 3:

$171852 - 58076.857142857145 = 113775.14285714286$

$324804.56 - 177952.92142857146 = 146851.63857142854$

Totale euclidische som: 34510186883.27675

Euclidische afstand: 185769.17635408934

-----

{0: 132944.6574762543, 1: 76382.16564099609, 2: 244412.67637173377, 3:  
185769.17635408934}

1

=====

Afstand van bronindex 19 tot...

Centrumindex 0:

$88444 - 84293.25 = 4150.75$

$321688.92 - 224765.83125 = 96923.08875$

Totale euclidische som: 9411313858.402876

Euclidische afstand: 97011.9263719821

-----

Centrumindex 1:

$88444 - 117837.71428571429 = -29393.71428571429$

$321688.92 - 378810.96857142856 = -57122.048571428575$

Totale euclidische som: 4126918872.50685

Euclidische afstand: 64241.099558669215

-----

Centrumindex 2:

```

88444 - 51601.0 = 36843.0
321688.92 - 112020.03666666668 = 209668.8833333333
Totale euclidische som: 45318447287.24693
Euclidische afstand: 212881.29858502586
-----

Centrumindex 3:
88444 - 58076.857142857145 = 30367.142857142855
321688.92 - 177952.92142857146 = 143735.99857142853
Totale euclidische som: 21582200650.631824
Euclidische afstand: 146908.81747067405
-----

{0: 97011.9263719821, 1: 64241.099558669215, 2: 212881.29858502586, 3:
146908.81747067405}
1
=====
Afstand van bronindex 20 tot...
Centrumindex 0:
76848 - 84293.25 = -7445.25
342898.94 - 224765.83125 = 118133.10875000001
Totale euclidische som: 14010863130.50183
Euclidische afstand: 118367.49186538435
-----

Centrumindex 1:
76848 - 117837.71428571429 = -40989.71428571429
342898.94 - 378810.96857142856 = -35912.02857142856
Totale euclidische som: 2969830473.339591
Euclidische afstand: 54496.15099563997
-----

Centrumindex 2:
76848 - 51601.0 = 25247.0
342898.94 - 112020.03666666668 = 230878.90333333332
Totale euclidische som: 53942479013.40267
Euclidische afstand: 232255.20233872626
-----

Centrumindex 3:
76848 - 58076.857142857145 = 18771.142857142855
342898.94 - 177952.92142857146 = 164946.01857142855
Totale euclidische som: 27559544846.729317
Euclidische afstand: 166010.6769058223
-----

{0: 118367.49186538435, 1: 54496.15099563997, 2: 232255.20233872626, 3:
166010.6769058223}
1
=====
Afstand van bronindex 21 tot...
Centrumindex 0:
83110 - 84293.25 = -1183.25
403109.89 - 224765.83125 = 178344.05875000003

```

Totale euclidische som: 31808003371.985962  
Euclidische afstand: 178347.9839302535

---

Centrumindex 1:

83110 - 117837.71428571429 = -34727.71428571429

403109.89 - 378810.96857142856 = 24298.921428571455

Totale euclidische som: 1796451722.1020932

Euclidische afstand: 42384.56938677203

---

Centrumindex 2:

83110 - 51601.0 = 31509.0

403109.89 - 112020.03666666668 = 291089.85333333333

Totale euclidische som: 85726119794.6215

Euclidische afstand: 292790.23172677995

---

Centrumindex 3:

83110 - 58076.857142857145 = 25033.142857142855

403109.89 - 177952.92142857146 = 225156.96857142856

Totale euclidische som: 51322318737.58139

Euclidische afstand: 226544.2975172436

---

{0: 178347.9839302535, 1: 42384.56938677203, 2: 292790.23172677995, 3:  
226544.2975172436}

1

=====

Afstand van bronindex 22 tot...

Centrumindex 0:

33550 - 84293.25 = -50743.25

168475.23 - 224765.83125 = -56290.60124999998

Totale euclidische som: 5743509209.648999

Euclidische afstand: 75785.9433513168

---

Centrumindex 1:

33550 - 117837.71428571429 = -84287.71428571429

168475.23 - 378810.96857142856 = -210335.73857142855

Totale euclidische som: 51345541699.898544

Euclidische afstand: 226595.54651382394

---

Centrumindex 2:

33550 - 51601.0 = -18051.0

168475.23 - 112020.03666666668 = 56455.19333333333

Totale euclidische som: 3513027455.304044

Euclidische afstand: 59270.797660433454

---

Centrumindex 3:

33550 - 58076.857142857145 = -24526.857142857145

168475.23 - 177952.92142857146 = -9477.691428571445

Totale euclidische som: 691393356.1213392

```

Euclidische afstand: 26294.359777742055
-----
{0: 75785.9433513168, 1: 226595.54651382394, 2: 59270.797660433454, 3:
26294.359777742055}
3
=====
Afstand van bronindex 23 tot...
  Centrumindex 0:
    65862 - 84293.25 = -18431.25
    195489.13 - 224765.83125 = -29276.701249999984
  Totale euclidische som: 1196836212.6442506
  Euclidische afstand: 34595.32067555164
-----
  Centrumindex 1:
    65862 - 117837.71428571429 = -51975.71428571429
    195489.13 - 378810.96857142856 = -183321.83857142855
  Totale euclidische som: 36308371372.71912
  Euclidische afstand: 190547.5567219877
-----
  Centrumindex 2:
    65862 - 51601.0 = 14261.0
    195489.13 - 112020.03666666668 = 83469.09333333332
  Totale euclidische som: 7170465662.888709
  Euclidische afstand: 84678.60215478706
-----
  Centrumindex 3:
    65862 - 58076.857142857145 = 7785.142857142855
    195489.13 - 177952.92142857146 = 17536.20857142855
  Totale euclidische som: 368127060.3667666
  Euclidische afstand: 19186.637547177634
-----
{0: 34595.32067555164, 1: 190547.5567219877, 2: 84678.60215478706, 3:
19186.637547177634}
3
=====
Afstand van bronindex 24 tot...
  Centrumindex 0:
    62844 - 84293.25 = -21449.25
    225383.89 - 224765.83125 = 618.0587500000256
  Totale euclidische som: 460452322.1809516
  Euclidische afstand: 21458.15281381302
-----
  Centrumindex 1:
    62844 - 117837.71428571429 = -54993.71428571429
    225383.89 - 378810.96857142856 = -153427.07857142854
  Totale euclidische som: 26564177049.902084
  Euclidische afstand: 162985.2050030986
-----

```

```

Centrumindex 2:
    62844 - 51601.0 = 11243.0
    225383.89 - 112020.03666666668 = 113363.85333333333
Totale euclidische som: 12977768291.58151
Euclidische afstand: 113920.00830223596
-----

Centrumindex 3:
    62844 - 58076.857142857145 = 4767.142857142855
    225383.89 - 177952.92142857146 = 47430.96857142856
Totale euclidische som: 2272422430.644252
Euclidische afstand: 47669.93214432187
-----

{0: 21458.15281381302, 1: 162985.2050030986, 2: 113920.00830223596, 3:
47669.93214432187}
0
=====
Afstand van bronindex 25 tot...
Centrumindex 0:
    19214 - 84293.25 = -65079.25
    114444.77 - 224765.83125 = -110321.06124999998
Totale euclidische som: 16406045335.888748
Euclidische afstand: 128086.08564511896
-----

Centrumindex 1:
    19214 - 117837.71428571429 = -98623.71428571429
    114444.77 - 378810.96857142856 = -264366.19857142854
Totale euclidische som: 79616123966.6182
Euclidische afstand: 282163.2930886266
-----

Centrumindex 2:
    19214 - 51601.0 = -32387.0
    114444.77 - 112020.03666666668 = 2424.7333333333227
Totale euclidische som: 1054797100.7377777
Euclidische afstand: 32477.640011826254
-----

Centrumindex 3:
    19214 - 58076.857142857145 = -38862.857142857145
    114444.77 - 177952.92142857146 = -63508.15142857145
Totale euclidische som: 5543606963.180485
Euclidische afstand: 74455.4025117082
-----

{0: 128086.08564511896, 1: 282163.2930886266, 2: 32477.640011826254, 3:
74455.4025117082}
2
=====
Afstand van bronindex 26 tot...
Centrumindex 0:
    44992 - 84293.25 = -39301.25

```

175456.95 - 224765.83125 = -49308.88124999998  
Totale euclidische som: 3975954021.6890993  
Euclidische afstand: 63055.16649481706

---

Centrumindex 1:  
44992 - 117837.71428571429 = -72845.71428571429  
175456.95 - 378810.96857142856 = -203354.01857142855  
Totale euclidische som: 46659354958.944824  
Euclidische afstand: 216007.76596906147

---

Centrumindex 2:  
44992 - 51601.0 = -6609.0  
175456.95 - 112020.03666666668 = 63436.91333333333  
Totale euclidische som: 4067920854.260844  
Euclidische afstand: 63780.25442298615

---

Centrumindex 3:  
44992 - 58076.857142857145 = -13084.857142857145  
175456.95 - 177952.92142857146 = -2495.9714285714435  
Totale euclidische som: 177443359.82122463  
Euclidische afstand: 13320.786756840776

---

{0: 63055.16649481706, 1: 216007.76596906147, 2: 63780.25442298615, 3:  
13320.786756840776}  
3

=====

Afstand van bronindex 28 tot...

Centrumindex 0:  
66630 - 84293.25 = -17663.25  
189991.35 - 224765.83125 = -34774.48124999998  
Totale euclidische som: 1521254946.7691004  
Euclidische afstand: 39003.26841136651

---

Centrumindex 1:  
66630 - 117837.71428571429 = -51207.71428571429  
189991.35 - 378810.96857142856 = -188819.61857142855  
Totale euclidische som: 38275078359.82712  
Euclidische afstand: 195640.1757304136

---

Centrumindex 2:  
66630 - 51601.0 = 15029.0  
189991.35 - 112020.03666666668 = 77971.31333333333  
Totale euclidische som: 6305396543.924843  
Euclidische afstand: 79406.5270864105

---

Centrumindex 3:  
66630 - 58076.857142857145 = 8553.142857142855  
189991.35 - 177952.92142857146 = 12038.42857142855

```

Totale euclidische som: 218080015.20408112
Euclidische afstand: 14767.532468360485
-----
{0: 39003.26841136651, 1: 195640.1757304136, 2: 79406.5270864105, 3:
14767.532468360485}
3
=====
Afstand van bronindex 29 tot...
Centrumindex 0:
    75426 - 84293.25 = -8867.25
    211154.37 - 224765.83125 = -13611.461249999993
Totale euclidische som: 263899999.92275137
Euclidische afstand: 16244.99922815484
-----
Centrumindex 1:
    75426 - 117837.71428571429 = -42411.71428571429
    211154.37 - 378810.96857142856 = -167656.59857142856
Totale euclidische som: 29907488553.194202
Euclidische afstand: 172937.81701292
-----
Centrumindex 2:
    75426 - 51601.0 = 23825.0
    211154.37 - 112020.036666666668 = 99134.33333333331
Totale euclidische som: 10395246670.444444
Euclidische afstand: 101957.08249280401
-----
Centrumindex 3:
    75426 - 58076.857142857145 = 17349.142857142855
    211154.37 - 177952.92142857146 = 33201.44857142854
Totale euclidische som: 1403328945.1187654
Euclidische afstand: 37461.03235521901
-----
{0: 16244.99922815484, 1: 172937.81701292, 2: 101957.08249280401, 3:
37461.03235521901}
0
=====
Afstand van bronindex 30 tot...
Centrumindex 0:
    97282 - 84293.25 = 12988.75
    81545.55 - 224765.83125 = -143220.28125
Totale euclidische som: 20680756587.8916
Euclidische afstand: 143808.05466972844
-----
Centrumindex 1:
    97282 - 117837.71428571429 = -20555.71428571429
    81545.55 - 378810.96857142856 = -297265.41857142857
Totale euclidische som: 88789266468.24254
Euclidische afstand: 297975.27828369004

```

```

-----
Centrumindex 2:
    97282 - 51601.0 = 45681.0
    81545.55 - 112020.03666666668 = -30474.48666666668
Totale euclidische som: 3015448098.596845
Euclidische afstand: 54913.09587518122
-----

Centrumindex 3:
    97282 - 58076.857142857145 = 39205.142857142855
    81545.55 - 177952.92142857146 = -96407.37142857145
Totale euclidische som: 10831424492.215515
Euclidische afstand: 104074.12979321765
-----

{0: 143808.05466972844, 1: 297975.27828369004, 2: 54913.09587518122, 3:
104074.12979321765}
2
=====
Afstand van bronindex 31 tot...
Centrumindex 0:
    56488 - 84293.25 = -27805.25
    165810.09 - 224765.83125 = -58955.74124999999
Totale euclidische som: 4248911353.899451
Euclidische afstand: 65183.6739828268
-----

Centrumindex 1:
    56488 - 117837.71428571429 = -61349.71428571429
    165810.09 - 378810.96857142856 = -213000.87857142856
Totale euclidische som: 49133161715.13923
Euclidische afstand: 221660.01379396155
-----

Centrumindex 2:
    56488 - 51601.0 = 4887.0
    165810.09 - 112020.03666666668 = 53790.053333333315
Totale euclidische som: 2917252606.6028423
Euclidische afstand: 54011.59696401174
-----

Centrumindex 3:
    56488 - 58076.857142857145 = -1588.857142857145
    165810.09 - 177952.92142857146 = -12142.831428571459
Totale euclidische som: 149972822.12311095
Euclidische afstand: 12246.339131475615
-----

{0: 65183.6739828268, 1: 221660.01379396155, 2: 54011.59696401174, 3:
12246.339131475615}
3
=====
Afstand van bronindex 32 tot...
Centrumindex 0:

```



```

36358 - 84293.25 = -47935.25
133803.8 - 224765.83125 = -90962.03125
Totale euclidische som: 10571879321.688477
Euclidische afstand: 102819.64462926565
-----

Centrumindex 1:
36358 - 117837.71428571429 = -81479.71428571429
133803.8 - 378810.96857142856 = -245007.16857142857
Totale euclidische som: 66667456491.47005
Euclidische afstand: 258200.419231786
-----

Centrumindex 2:
36358 - 51601.0 = -15243.0
133803.8 - 112020.03666666668 = 21783.763333333307
Totale euclidische som: 706881393.9626766
Euclidische afstand: 26587.241187507152
-----

Centrumindex 3:
36358 - 58076.857142857145 = -21718.857142857145
133803.8 - 177952.92142857146 = -44149.12142857147
Totale euclidische som: 2420853678.506585
Euclidische afstand: 49202.171481618425
-----

{0: 102819.64462926565, 1: 258200.419231786, 2: 26587.241187507152, 3:
49202.171481618425}
2
=====
Afstand van bronindex 33 tot...
Centrumindex 0:
41796 - 84293.25 = -42497.25
130358.39 - 224765.83125 = -94407.44124999999
Totale euclidische som: 10718781220.9347
Euclidische afstand: 103531.54698416662
-----

Centrumindex 1:
41796 - 117837.71428571429 = -76041.71428571429
130358.39 - 378810.96857142856 = -248452.57857142854
Totale euclidische som: 67511026110.30208
Euclidische afstand: 259828.84002801168
-----

Centrumindex 2:
41796 - 51601.0 = -9805.0
130358.39 - 112020.03666666668 = 18338.353333333318
Totale euclidische som: 432433227.9781772
Euclidische afstand: 20795.02892467758
-----

Centrumindex 3:
41796 - 58076.857142857145 = -16280.857142857145

```

```

130358.39 - 177952.92142857146 = -47594.531428571456
Totale euclidische som: 2530305731.211398
Euclidische afstand: 50302.14439973109
-----
{0: 103531.54698416662, 1: 259828.84002801168, 2: 20795.02892467758, 3:
50302.14439973109}
2
=====
Afstand van bronindex 34 tot...
Centrumindex 0:
41108 - 84293.25 = -43185.25
123299.6 - 224765.83125 = -101466.23124999998
Totale euclidische som: 12160361901.640972
Euclidische afstand: 110274.03094854641
-----
Centrumindex 1:
41108 - 117837.71428571429 = -76729.71428571429
123299.6 - 378810.96857142856 = -255511.36857142855
Totale euclidische som: 71173508523.61176
Euclidische afstand: 266783.6361616127
-----
Centrumindex 2:
41108 - 51601.0 = -10493.0
123299.6 - 112020.03666666668 = 11279.563333333324
Totale euclidische som: 237331597.9906776
Euclidische afstand: 15405.57035590301
-----
Centrumindex 3:
41108 - 58076.857142857145 = -16968.857142857145
123299.6 - 177952.92142857146 = -54653.32142857145
Totale euclidische som: 3274927655.909441
Euclidische afstand: 57226.983634553384
-----
{0: 110274.03094854641, 1: 266783.6361616127, 2: 15405.57035590301, 3:
57226.983634553384}
2
=====
Afstand van bronindex 35 tot...
Centrumindex 0:
87954 - 84293.25 = 3660.75
266665.35 - 224765.83125 = 41899.51874999999
Totale euclidische som: 1768970762.0441005
Euclidische afstand: 42059.134109537976
-----
Centrumindex 1:
87954 - 117837.71428571429 = -29883.71428571429
266665.35 - 378810.96857142856 = -112145.61857142858
Totale euclidische som: 13469676144.278551

```

```

Euclidische afstand: 116058.9339270293
-----
Centrumindex 2:
      87954 - 51601.0 = 36353.0
      266665.35 - 112020.03666666668 = 154645.3133333333
Totale euclidische som: 25236713544.964832
Euclidische afstand: 158860.67337439067
-----
Centrumindex 3:
      87954 - 58076.857142857145 = 29877.142857142855
      266665.35 - 177952.92142857146 = 88712.42857142852
Totale euclidische som: 8762538648.34693
Euclidische afstand: 93608.43257071945
-----
{0: 42059.134109537976, 1: 116058.9339270293, 2: 158860.67337439067, 3:
93608.43257071945}
0
=====
Afstand van bronindex 36 tot...
Centrumindex 0:
      86514 - 84293.25 = 2220.75
      221279.16 - 224765.83125 = -3486.671249999985
Totale euclidische som: 17088606.968076456
Euclidische afstand: 4133.8368337509955
-----
Centrumindex 1:
      86514 - 117837.71428571429 = -31323.71428571429
      221279.16 - 378810.96857142856 = -157531.80857142856
Totale euclidische som: 25797445788.43827
Euclidische afstand: 160615.8329319942
-----
Centrumindex 2:
      86514 - 51601.0 = 34913.0
      221279.16 - 112020.03666666668 = 109259.12333333332
Totale euclidische som: 13156473600.568542
Euclidische afstand: 114701.67217860663
-----
Centrumindex 3:
      86514 - 58076.857142857145 = 28437.142857142855
      221279.16 - 177952.92142857146 = 43326.23857142855
Totale euclidische som: 2685834042.625894
Euclidische afstand: 51825.03297274295
-----
{0: 4133.8368337509955, 1: 160615.8329319942, 2: 114701.67217860663, 3:
51825.03297274295}
0
=====
Afstand van bronindex 37 tot...

```

Centrumindex 0:

$$67242 - 84293.25 = -17051.25$$

$$216831.04 - 224765.83125 = -7934.79124999998$$

Totale euclidische som: 353706038.7435762

Euclidische afstand: 18807.074167546005

---

Centrumindex 1:

$$67242 - 117837.71428571429 = -50595.71428571429$$

$$216831.04 - 378810.96857142856 = -161979.92857142855$$

Totale euclidische som: 28797423564.08673

Euclidische afstand: 169698.03641788766

---

Centrumindex 2:

$$67242 - 51601.0 = 15641.0$$

$$216831.04 - 112020.03666666668 = 104811.00333333333$$

Totale euclidische som: 11229987300.74001

Euclidische afstand: 105971.63441572471

---

Centrumindex 3:

$$67242 - 58076.857142857145 = 9165.142857142855$$

$$216831.04 - 177952.92142857146 = 38878.11857142855$$

Totale euclidische som: 1595507947.2458944

Euclidische afstand: 39943.809873945356

---

{0: 18807.074167546005, 1: 169698.03641788766, 2: 105971.63441572471, 3: 39943.809873945356}

0

=====

Afstand van bronindex 38 tot...

Centrumindex 0:

$$49692 - 84293.25 = -34601.25$$

$$179281.69 - 224765.83125 = -45484.141249999986$$

Totale euclidische som: 3266053606.8124504

Euclidische afstand: 57149.39725677297

---

Centrumindex 1:

$$49692 - 117837.71428571429 = -68145.71428571429$$

$$179281.69 - 378810.96857142856 = -199529.27857142856$$

Totale euclidische som: 44455771382.74495

Euclidische afstand: 210845.37315944344

---

Centrumindex 2:

$$49692 - 51601.0 = -1909.0$$

$$179281.69 - 112020.03666666668 = 67261.65333333332$$

Totale euclidische som: 4527774290.13351

Euclidische afstand: 67288.73821178035

---

Centrumindex 3:

```

49692 - 58076.857142857145 = -8384.857142857145
179281.69 - 177952.92142857146 = 1328.7685714285471
Totale euclidische som: 72071455.22253874
Euclidische afstand: 8489.490869453759
-----
{0: 57149.39725677297, 1: 210845.37315944344, 2: 67288.73821178035, 3:
8489.490869453759}
3
=====
Afstand van bronindex 39 tot...
Centrumindex 0:
74940 - 84293.25 = -9353.25
261826.18 - 224765.83125 = 37060.348750000005
Totale euclidische som: 1460952735.034127
Euclidische afstand: 38222.41142358926
-----
Centrumindex 1:
74940 - 117837.71428571429 = -42897.71428571429
261826.18 - 378810.96857142856 = -116984.78857142857
Totale euclidische som: 15525654648.040619
Euclidische afstand: 124601.98492817287
-----
Centrumindex 2:
74940 - 51601.0 = 23339.0
261826.18 - 112020.03666666668 = 149806.14333333333
Totale euclidische som: 22986589501.407204
Euclidische afstand: 151613.28932981833
-----
Centrumindex 3:
74940 - 58076.857142857145 = 16863.142857142855
261826.18 - 177952.92142857146 = 83873.25857142854
Totale euclidische som: 7319089090.410118
Euclidische afstand: 85551.6749713886
-----
{0: 38222.41142358926, 1: 124601.98492817287, 2: 151613.28932981833, 3:
85551.6749713886}
0
=====
Afstand van bronindex 6 tot...
Centrumindex 0:
89324 - 84293.25 = 5030.75
171166.01 - 224765.83125 = -53599.82124999998
Totale euclidische som: 2898249283.5944495
Euclidische afstand: 53835.39062358932
-----
Centrumindex 1:
89324 - 117837.71428571429 = -28513.71428571429
171166.01 - 378810.96857142856 = -207644.95857142855

```

Totale euclidische som: 43929460722.49763  
Euclidische afstand: 209593.56078490967

-----  
Centrumindex 2:

89324 - 51601.0 = 37723.0

171166.01 - 112020.03666666668 = 59145.97333333333

Totale euclidische som: 4921270890.547377

Euclidische afstand: 70151.77040208876

-----  
Centrumindex 3:

89324 - 58076.857142857145 = 31247.142857142855

171166.01 - 177952.92142857146 = -6786.911428571446

Totale euclidische som: 1022446103.4739674

Euclidische afstand: 31975.711148838698

-----  
{0: 53835.39062358932, 1: 209593.56078490967, 2: 70151.77040208876, 3:  
31975.711148838698}

3

=====

Afstand van bronindex 7 tot...

Centrumindex 0:

115570 - 84293.25 = 31276.75

339516.33 - 224765.83125 = 114750.49875000003

Totale euclidische som: 14145912053.936258

Euclidische afstand: 118936.58837353735

-----  
Centrumindex 1:

115570 - 117837.71428571429 = -2267.71428571429

339516.33 - 378810.96857142856 = -39294.63857142854

Totale euclidische som: 1549211148.5408323

Euclidische afstand: 39360.01967149956

-----  
Centrumindex 2:

115570 - 51601.0 = 63969.0

339516.33 - 112020.03666666668 = 227496.29333333333

Totale euclidische som: 55846596441.406044

Euclidische afstand: 236318.8448715126

-----  
Centrumindex 3:

115570 - 58076.857142857145 = 57493.142857142855

339516.33 - 177952.92142857146 = 161563.40857142856

Totale euclidische som: 29408196464.810192

Euclidische afstand: 171488.18170594203

-----  
{0: 118936.58837353735, 1: 39360.01967149956, 2: 236318.8448715126, 3:  
171488.18170594203}

1

=====

Afstand van bronindex 9 tot...

Centrumindex 0:

130978 - 84293.25 = 46684.75

402590.49 - 224765.83125 = 177824.65875

Totale euclidische som: 33801075142.11645

Euclidische afstand: 183850.68708633224

-----  
Centrumindex 1:

130978 - 117837.71428571429 = 13140.28571428571

402590.49 - 378810.96857142856 = 23779.521428571432

Totale euclidische som: 738132748.0249491

Euclidische afstand: 27168.598565714594

-----  
Centrumindex 2:

130978 - 51601.0 = 79377.0

402590.49 - 112020.03666666668 = 290570.45333333333

Totale euclidische som: 90731896479.33884

Euclidische afstand: 301217.3575332916

-----  
Centrumindex 3:

130978 - 58076.857142857145 = 72901.14285714286

402590.49 - 177952.92142857146 = 224637.56857142854

Totale euclidische som: 55776613843.56081

Euclidische afstand: 236170.73028544584

-----  
{0: 183850.68708633224, 1: 27168.598565714594, 2: 301217.3575332916, 3:  
236170.73028544584}

1

=====

```
[ ]:          QUANTITY  UNIT_SALE_PRICE  Centrum
SALES_BRANCH_CODE
13          102648          188463.46          0.0
14          116778          206523.20          0.0
15          158062          517067.65          1.0
17           73848           88668.11          2.0
18          171852          324804.56          1.0
19           88444          321688.92          1.0
20           76848          342898.94          1.0
21           83110          403109.89          1.0
22           33550          168475.23          3.0
23           65862          195489.13          3.0
24           62844          225383.89          0.0
25           19214          114444.77          2.0
26           44992          175456.95          3.0
28           66630          189991.35          3.0
29           75426          211154.37          0.0
```

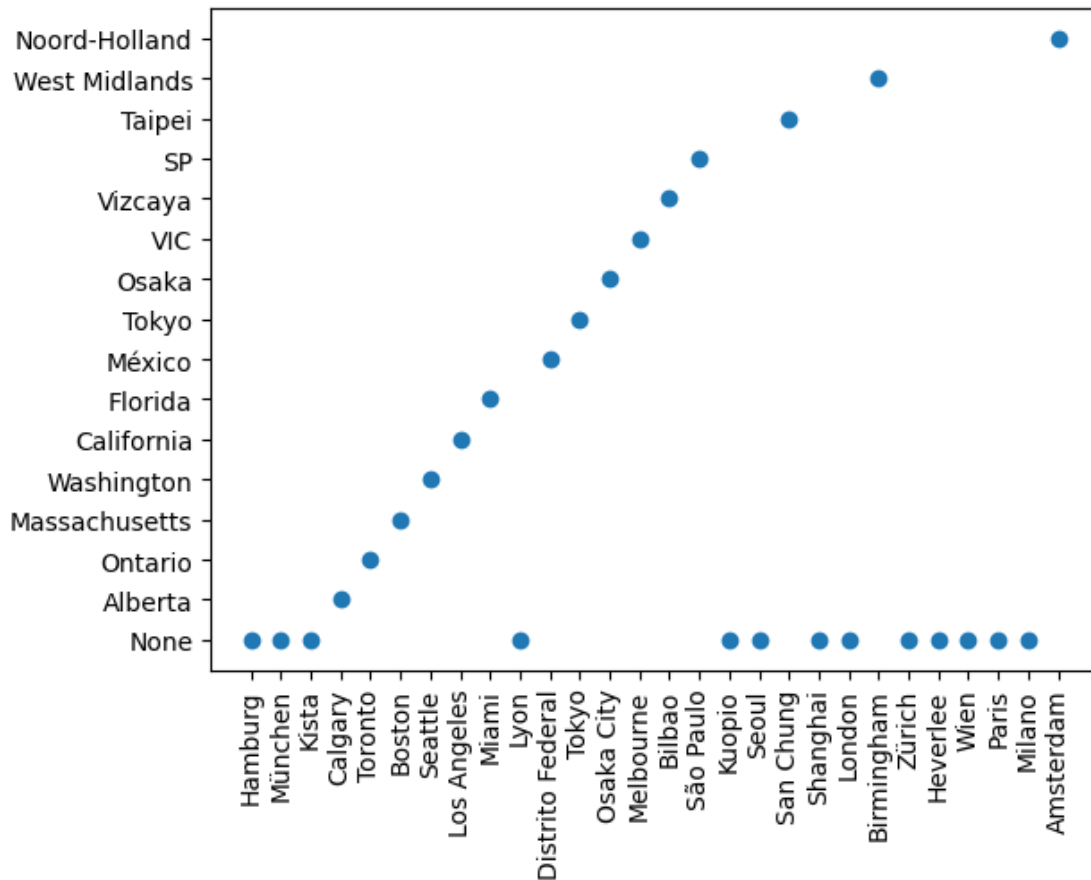
30	97282	81545.55	2.0
31	56488	165810.09	3.0
32	36358	133803.80	2.0
33	41796	130358.39	2.0
34	41108	123299.60	2.0
35	87954	266665.35	0.0
36	86514	221279.16	0.0
37	67242	216831.04	0.0
38	49692	179281.69	3.0
39	74940	261826.18	0.0
6	89324	171166.01	3.0
7	115570	339516.33	1.0
9	130978	402590.49	1.0

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.

```
[ ]: # (Helaas verouderd)
# plt.scatter(table['TERRITORY_NAME_EN'], table['CURRENCY_NAME'], c =
    ↪ prediction_results, cmap = 'rainbow')
# plt.show()
# Nu gaan we een bar weergeven, waar alle quantiteiten worden weergegeven per
    ↪ sales_branch
# Create a DataFrame with the branch names mapping
branch_names = sales_branch[['SALES_BRANCH_CODE', 'CITY', 'REGION']]
branch_names = branch_names.drop_duplicates()
branch_names['CITY']

plt.scatter(branch_names['CITY'].astype(str), branch_names['REGION'].
    ↪ astype(str))
plt.xticks(rotation=90)
plt.show()
```





De centra van de clusters worden geëxtraheerd en weergegeven.

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

```
[ ]:
  Centrum
0        8
1        7
2        6
3        7
```

## 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(sales_product_data)
prediction_results
```

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

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

```
[ ]:
      Camping Equipment  Golf Equipment  \
SALES_BRANCH_CODE
13                    0.409370         0.123656
14                    0.377478         0.155432
15                    0.411430         0.085079
17                    0.383126         0.042877
18                    0.401382         0.178628
19                    0.532534         0.084760
20                    0.391703         0.076419
21                    0.468878         0.087633
22                    0.405076         0.165482
23                    0.371622         0.207529
24                    0.370558         0.160986
25                    0.095070         0.330986
26                    0.089474         0.175439
28                    0.460123         0.095433
29                    0.316947         0.125485
30                    0.440063         0.123028
31                    0.331240         0.085557
32                    0.000000         0.315946
33                    0.000000         0.332326
34                    0.000000         0.264865
35                    0.476429         0.068205
36                    0.444041         0.095584
37                    0.415531         0.106948
38                    0.409861         0.087827
39                    0.439621         0.081337
6                     0.389522         0.123007
7                     0.366025         0.113398
9                     0.393523         0.105245
```

```
      Mountaineering Equipment  Outdoor Protection  \
SALES_BRANCH_CODE
13                    0.132873         0.133641
14                    0.161776         0.096749
15                    0.213085         0.119214
17                    0.237898         0.106501
18                    0.106326         0.117491
19                    0.048373         0.140839
20                    0.253712         0.086463
21                    0.142097         0.112203
```

22	0.081218	0.148223
23	0.143822	0.100386
24	0.099347	0.191443
25	0.068662	0.209507
26	0.114912	0.250877
28	0.194274	0.081118
29	0.206986	0.207633
30	0.077287	0.134069
31	0.285714	0.121664
32	0.000000	0.228018
33	0.000000	0.265861
34	0.000000	0.393243
35	0.127382	0.108325
36	0.099819	0.116757
37	0.212534	0.060627
38	0.284284	0.063945
39	0.173653	0.095309
6	0.135156	0.138193
7	0.232925	0.095009
9	0.165083	0.116156

	Personal Accessories	Centrum
SALES_BRANCH_CODE		
13	0.200461	4
14	0.208565	4
15	0.171192	2
17	0.229599	2
18	0.196172	4
19	0.193493	3
20	0.191703	2
21	0.189189	3
22	0.200000	4
23	0.176641	4
24	0.177665	0
25	0.295775	1
26	0.369298	1
28	0.169052	2
29	0.142950	0
30	0.225552	3
31	0.175824	2
32	0.456036	1
33	0.401813	1
34	0.341892	1
35	0.219659	3
36	0.243799	3
37	0.204360	2
38	0.154083	2

39	0.210080	2
6	0.214123	4
7	0.192644	2
9	0.219993	4

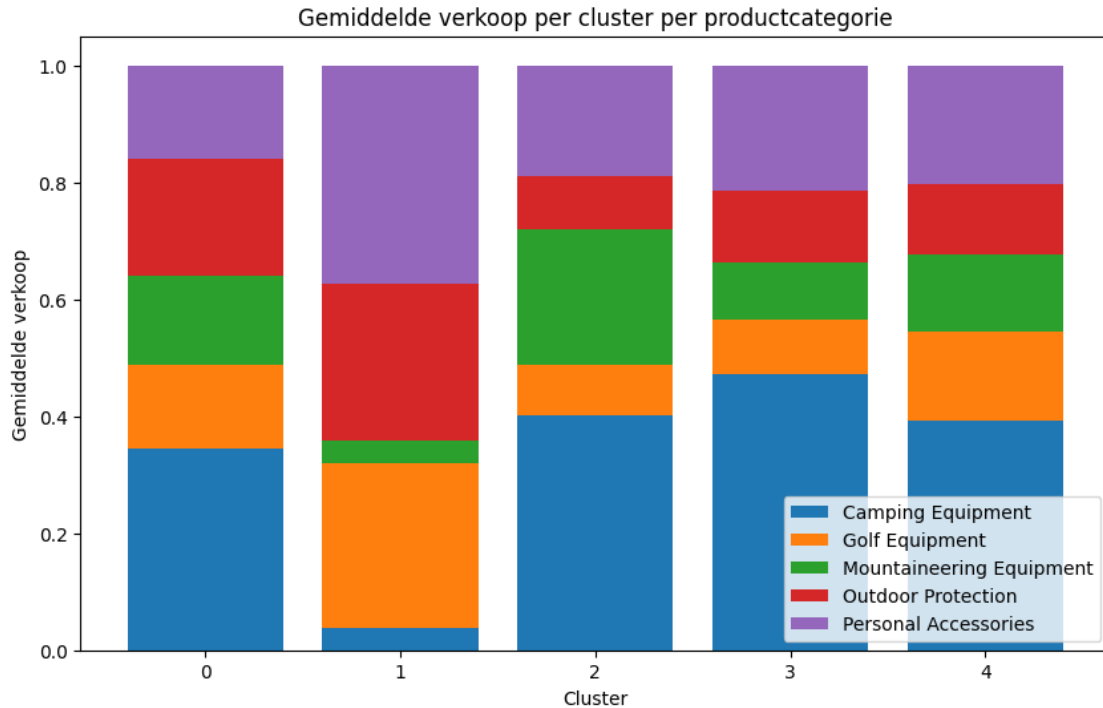
```
[ ]: sales_product_data.groupby('Centrum', as_index = False)['Centrum'].count()
```

```
[ ]: Centrum
0      2
1      5
2      9
3      5
4      7
```

Hier visualiseren we de gemiddelde verkoop van verschillende productcategorieën binnen elk cluster.

```
[ ]: cluster_sales_mean = sales_product_data.groupby('Centrum').mean()

# Visualisatie van gemiddelde verkoop per cluster
plt.figure(figsize=(10, 6))
plt.bar(cluster_sales_mean.index, cluster_sales_mean['Camping Equipment'],
        label='Camping Equipment')
plt.bar(cluster_sales_mean.index, cluster_sales_mean['Golf Equipment'],
        bottom=cluster_sales_mean['Camping Equipment'], label='Golf Equipment')
plt.bar(cluster_sales_mean.index, cluster_sales_mean['Mountaineering Equipment'],
        bottom=cluster_sales_mean['Camping Equipment']
        +cluster_sales_mean['Golf Equipment'], label='Mountaineering Equipment')
plt.bar(cluster_sales_mean.index, cluster_sales_mean['Outdoor Protection'],
        bottom=cluster_sales_mean['Camping Equipment']
        +cluster_sales_mean['Golf Equipment']
        +cluster_sales_mean['Mountaineering Equipment'], label='Outdoor Protection')
plt.bar(cluster_sales_mean.index, cluster_sales_mean['Personal Accessories'],
        bottom=cluster_sales_mean['Camping Equipment']
        +cluster_sales_mean['Golf Equipment']
        +cluster_sales_mean['Mountaineering Equipment']
        +cluster_sales_mean['Outdoor Protection'], label='Personal Accessories')
plt.xlabel('Cluster')
plt.ylabel('Gemiddelde verkoop')
plt.title('Gemiddelde verkoop per cluster per productcategorie')
plt.legend()
plt.show()
```



## 2.3 Evaluatie van de clustering

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

```
[ ]: # Lijst om interclusterafstanden op te slaan
intercluster_distances = []

# Lijst om intraclusterafstanden op te slaan
intracluster_distances = []

# Lijst van verschillende k's om te evalueren
k_values = [2, 3, 4, 5, 6]

for k in k_values:
    # K-means clusteringmodel toepassen
    kmeans = KMeans(n_clusters=k, random_state=42)
    prediction_results = kmeans.fit_predict(sales_product_data)

    # Interclusterafstand
    intercluster_distance = np.sum(np.min(kmeans.transform(sales_product_data),
↪axis=1)) / sales_product_data.shape[0]
    intercluster_distances.append(intercluster_distance)

    # Intraclusterafstand
```

```

    intracluster_distance = kmeans.inertia_ / sales_product_data.shape[0]
    intracluster_distances.append(intracluster_distance)

# Visualisatie van inter- en intraclusterafstanden voor verschillende k's
plt.plot(k_values, intercluster_distances, marker='o', label='Intercluster_
↳distance')
plt.plot(k_values, intracluster_distances, marker='x', label='Intracluster_
↳distance')
plt.xlabel('Number of clusters (k)')
plt.ylabel('Distance')
plt.title('Inter- and Intracluster distances for different k values')
plt.legend()
plt.show()

```

