

Module 5 Assignment 2: Other Distance-based Sampling

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```
## Rows: 8 Columns: 5

## -- Column specification -----
## Delimiter: ","
## dbl (5): Point, NE, SE, SW, NW

##
## i Use 'spec()' to retrieve the full column specification for this data.
## i Specify the column types or set 'show_col_types = FALSE' to quiet this message.
```

2.

```
## # A tibble: 6 x 5
##   Point    NE    SE    SW    NW
##   <dbl> <dbl> <dbl> <dbl> <dbl>
## 1     1     7    7.5    9.3   13.9
## 2     2    2.4    5.8    8.9   11.7
## 3     3   11.3    7.2    7.8    1.5
## 4     4    3.9     1   10.6    5.6
## 5     5    2.8    8.6   13    18.5
## 6     6     6    10     5     4.5
```

3.

```
## [1] 32

## # A tibble: 6 x 3
##   Point quarter distance
##   <dbl> <chr>      <dbl>
## 1     1 NE          7
## 2     1 SE         7.5
## 3     1 SW         9.3
## 4     1 NW        13.9
## 5     2 NE         2.4
## 6     2 SE         5.8
```

4.

```
## # A tibble: 6 x 4
##   Point quarter distance distance_sq
##   <dbl> <chr>      <dbl>      <dbl>
## 1     1    NE         7         49
## 2     1    SE        7.5        56.2
## 3     1    SW         9.3        86.5
## 4     1    NW        13.9       193.
## 5     2    NE         2.4         5.76
## 6     2    SE         5.8        33.6
```

5.

```
## # A tibble: 1 x 1
##   sum_squared
##   <dbl>
## 1    2983.
```

6.

```
##   sum_squared
## 1    9370.271
```

7.

```
##   sum_squared
## 1 0.003415056
```

9.

```
## [1] 4570.29
```

```
## [1] 5363.876
```

10.

```
## [1] 0.443428
```

12.

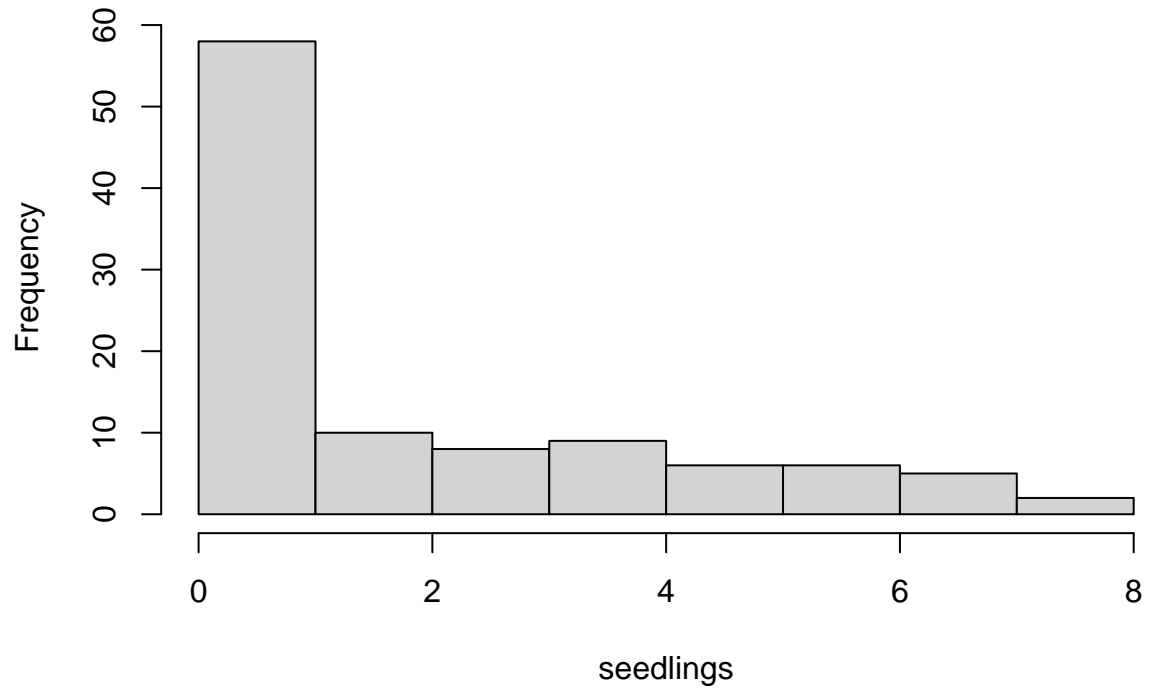
```
## [1] -1.385724
```

13.

```
## [1] 0.08291553
```

```
## seedlings
## 0 1 2 3 4 5 6 7 8
## 38 20 10 8 9 6 6 5 2
```

Histogram of seedlings



15.

16.

[1] 2.616035

18.

[1] 269.4516

19.

[1] 8.896468

20.

[1] 1