Module "4": Assignment 1

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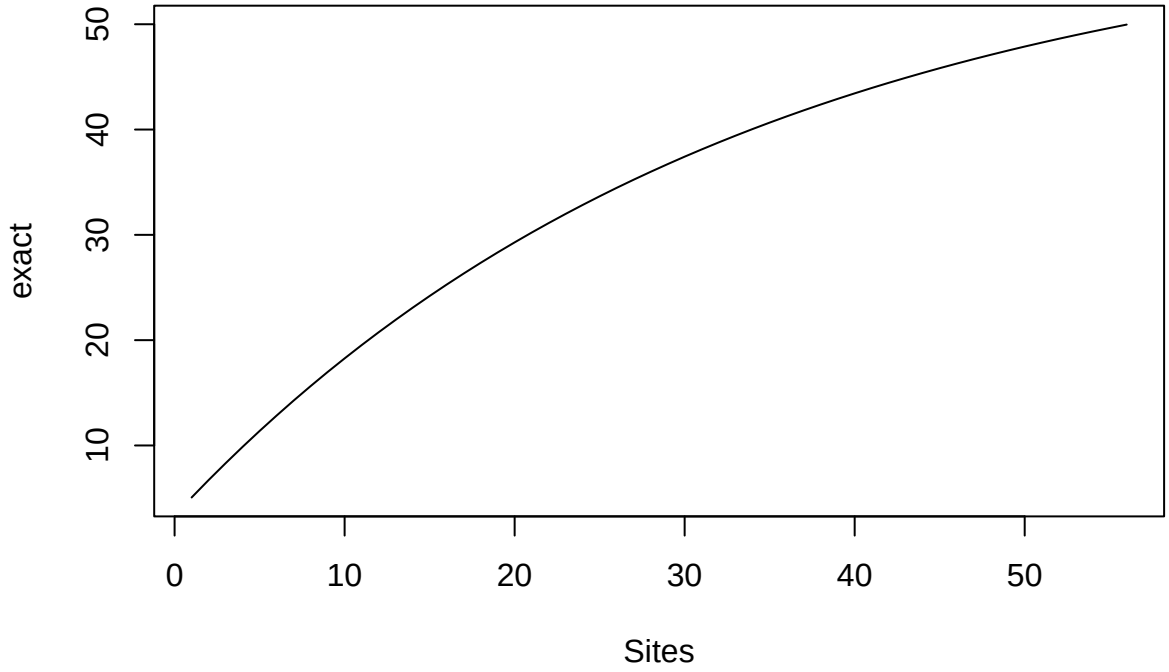
3.

```
##      Asym        R0       lrc
## 60.445437  3.357250 -3.497493
```



4.

5.

```
## [1] 8
```

```
## [1] 5
```

7.

```
## [1] 182
```

8.

```
## # A tibble: 8 x 3
##   species individuals   prop
##   <chr>         <dbl>  <dbl>
## 1 DO               14 0.0769
## 2 DM               89 0.489
## 3 SO               30 0.165
## 4 SH               12 0.0659
## 5 SF                3 0.0165
## 6 PP                3 0.0165
## 7 PB                8 0.0440
## 8 BA               23 0.126
```

9.

```
## # A tibble: 8 x 4
##   species individuals   prop ln_prop
##   <chr>         <dbl>  <dbl>   <dbl>
## 1 DO               14 0.0769  -2.56
## 2 DM               89 0.489   -0.715
## 3 SO               30 0.165   -1.80
## 4 SH               12 0.0659  -2.72
## 5 SF                3 0.0165  -4.11
## 6 PP                3 0.0165  -4.11
## 7 PB                8 0.0440  -3.12
## 8 BA               23 0.126   -2.07
```

10.

```
## # A tibble: 8 x 5
##   species individuals   prop ln_prop prop_lnprop
##   <chr>         <dbl>  <dbl>   <dbl>       <dbl>
## 1 DO               14 0.0769  -2.56      -0.197
## 2 DM               89 0.489   -0.715     -0.350
## 3 SO               30 0.165   -1.80      -0.297
## 4 SH               12 0.0659  -2.72      -0.179
## 5 SF                3 0.0165  -4.11      -0.0677
## 6 PP                3 0.0165  -4.11      -0.0677
## 7 PB                8 0.0440  -3.12      -0.137
## 8 BA               23 0.126   -2.07      -0.261
```

11.

```
## [1] 1.557667
```

12.

```
## [1] 1.600014
```

14.

```
## # A tibble: 8 x 6
##   species individuals   prop ln_prop prop_lnprop  prop_sq
##   <chr>         <dbl>  <dbl>   <dbl>       <dbl>    <dbl>
## 1 DO               14 0.0769  -2.56      -0.197  0.00592
## 2 DM               89 0.489   -0.715     -0.350  0.239
## 3 SO               30 0.165   -1.80      -0.297  0.0272
## 4 SH               12 0.0659  -2.72      -0.179  0.00435
## 5 SF                3 0.0165  -4.11      -0.0677 0.000272
## 6 PP                3 0.0165  -4.11      -0.0677 0.000272
## 7 PB                8 0.0440  -3.12      -0.137  0.00193
## 8 BA               23 0.126   -2.07      -0.261  0.0160
```

15.

```
## [1] 0.7049873
```

16.

```
## [1] 0.7962203
```