# Otter Assign for Rmd Test

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## Otter Assign for Rmd

```r
library(testthat)
library(ggplot2)
```

```
## Warning: replacing previous import 'vctrs::data_frame' by 'tibble::data_frame'
## when loading 'dplyr'
```

```r
rng_seed <- 42
```

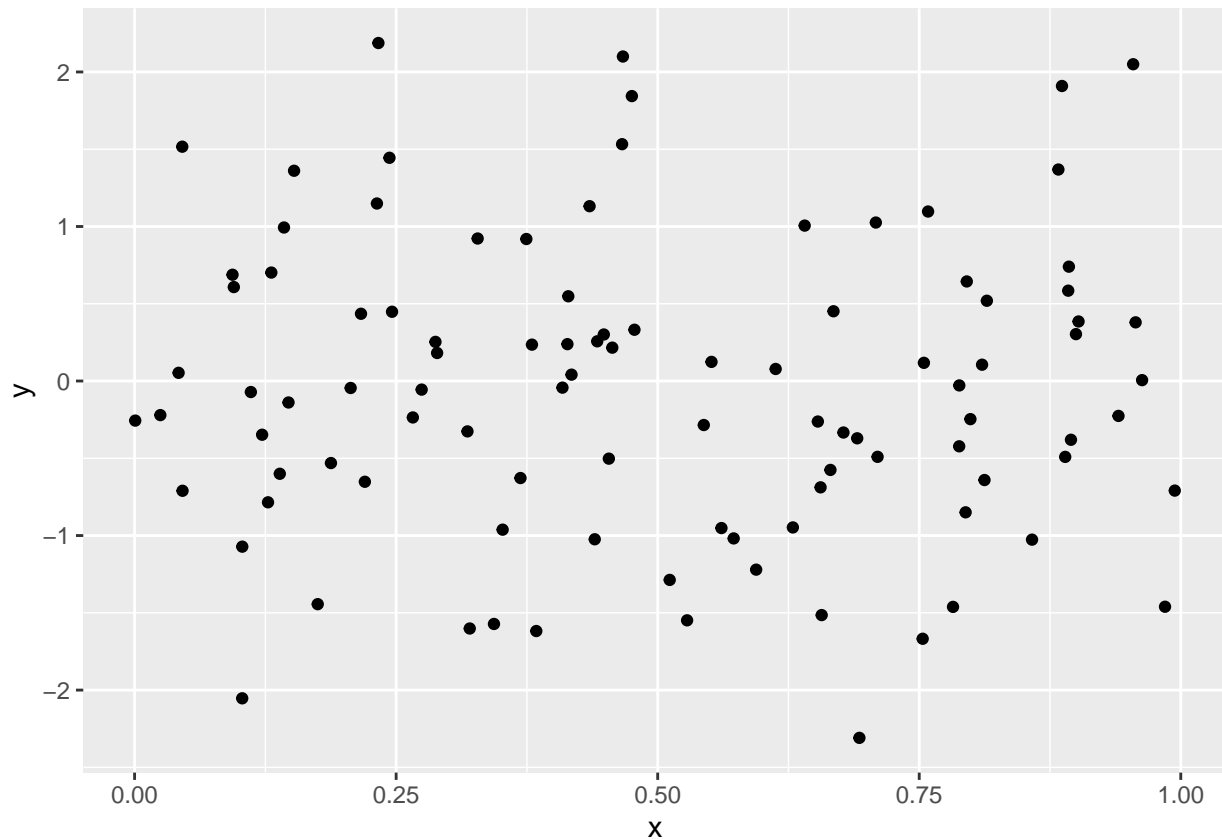**Question 1.** Assign x to the smallest prime number.

```r
x <- 2 # SOLUTION
```

```r
. = ottr::check("tests/q1.R")
```

```
## All tests passed!
```

**Question 2.** Visualize the answer

```r
set.seed(123) # SEED
# BEGIN SOLUTION NO PROMPT
x <- runif(100)
y <- rnorm(100)
data = data.frame(x, y)
ggplot(data, aes(x=x, y=y)) +
    geom_point()
```

```
# END SOLUTION
. = " # BEGIN PROMPT
plt.plot(...);
"; # END PROMPT
```

This cell is not part of a question.

```
y = 3
```

**Question 3.** Define `square` and assign `nine` to 3 squared.

```
square = function(x) {
    y = x * x # SOLUTION
    return(y) # SOLUTION
}

nine = square(3) # SOLUTION
```

```
. = ottr::check("tests/q3.R")
```

```
## All tests passed!
```

**Question 4.** What does equilateral mean?

Having equal side lengths.

```
# this isn't part of a question
# it's here to make sure that we get a MD cell above to close the export
# of question 4
```

**Question 5.** Approximate the area and circumference of a circle with radius 3.

```r
pi = 3.14
if (TRUE) {
    # BEGIN SOLUTION
    radius = 3
    area = radius * pi * pi
    # END SOLUTION
    print(paste0('A circle with radius', radius, 'has area', area))
}
```

```
## [1] "A circle with radius3has area29.5788"
```

```r
circumference = function(r) {
    # BEGIN SOLUTION NO PROMPT
    return(2 * pi * r)
    # END SOLUTION
    " # BEGIN PROMPT
    # Next, define a circumference function.
    "; # END PROMPT
}
```

```r
# This question has no tests.
```

**Question 6.** Write something

*This question has a custom prompt below, so that prompt should be in the output. It also has no solution!*

*Write your thing here.*

some thing

**Question 7:** What is the answer?

42

**Question 8:** Test intercell seeding by generating 10 random $N(4, 2)$ numbers.

```r
set.seed(42) # SEED
z = rnorm(10, 4, 2) # SOLUTION
z
```

```
##  [1] 6.741917 2.870604 4.726257 5.265725 4.808537 3.787751 7.023044 3.810682
##  [9] 8.036847 3.874572
```

```r
. = ottr::check("tests/q8.R")
```

```
## All tests passed!
```

**You're done!**