Name: ─────────────────────────   PID: ─────────────────────

Directions: Answer two of the three questions below. Write "Do Not Grade" in the blank space of the question you do not want me to grade. If you answer all three questions, I will only grade the first two questions. Each question is worth 1 point. The > before any variable assignment is the prompt as you would see if you were typing this code in the RStudio console.

For questions 1 and 2 consider the data frame `chicken.weight`.

```
> chicken.weight

  weight Time Chick Diet
1     42    0     1    1
2     51    2     1    1
3     59    4     1    1
4     64    6     1    1
5     76    8     1    1
6     93   10     1    1
7    106   12     1    1
8    125   14     1    1
```

1. Explain what the following code does.

```
> chicken.weight <- within(chicken.weight,
+                          gender <- rep("F", dim(chicken.weight)[1]))
> chicken.weight

  weight Time Chick Diet gender
1     42    0     1    1      F
2     51    2     1    1      F
3     59    4     1    1      F
4     64    6     1    1      F
5     76    8     1    1      F
6     93   10     1    1      F
7    106   12     1    1      F
8    125   14     1    1      F
```

2. What is the result of the following code?

```
> chicken.weight <- chicken.weight[c(3, 2)]
> chicken.weight

  Chick Time
1     1    0
2     1    2
3     1    4
4     1    6
5     1    8
6     1   10
7     1   12
8     1   14
```

3. Consider the matrix x below.

```
> set.seed(3)
> x <- matrix(rbinom(15, size = 10, prob = 0.5), 3, 5)
> x

     [,1] [,2] [,3] [,4] [,5]
[1,]    3    4    3    6    5
[2,]    6    5    4    5    5
[3,]    5    5    5    5    7
```

What is the result of the following code?

```
> min(apply(x, 1, max))

[1] 6
```