Univariate Figures Quiz

TOTAL POINTS 5

1. Say you have data saved to the my_data object that looks like this:

1 / 1 point

City	State	Population	
(categorical)	(categorical)	(numeric values)	

Which of these will draw a histogram for cities in the state of California?

```
1 my_data %>%
2 filter(State=="California") %>%
3 ggplot(aes="Population",geom="histogram)
4
```

0

```
1 ggplot(data=my_data,geom="histogram",
2 filter="Cities,California",
3 aes(x=Population)
```

•

```
my_data %>%

filter(State=="California") %>%
ggplot(aes(Population))+
definition
```

```
✓ Correct
Correct!
```

2. Say you have data saved to the my_data object that looks like this (same as question 1):

1/1 point

City	State	Population
(categorical)	(categorical)	(numeric values)

Which of these will draw a boxplot of population for cities in California?

 \bigcirc

```
1 my_data %>%
2     filter(state=="California") %>%
3          geom_hist(aes(Population))
```

•

```
my_data %>%
filter(State=="California") %>%
ggplot(aes(Population))+
geom_boxplot()
```

```
1 my_data %>%
2 filter(Cities %in% "California") %>%
3 ggplot(aes(Population))+
boxplot()

Correct
Correct!
```

3. Say you have data saved to the my_data object that looks like this (same as question 1):

1/1 point

City	State	Population
(categorical)	(categorical)	(numeric values)

Which of these will draw a density plot of population for cities in California?



```
my_data %>%
filter(State=="California") %>%
ggplot(aes(Population))+
geom_density()
```

 \circ

```
1 my_data %>%
2 filter(State=="California") %>%
3 ggplot(aes(Population),geom="density)
```

0

```
1 my_data %>%
2 filter(state=="California") %>%
3 ggplot(aes(Population),type="density")+
4 geom_line()
```

```
✓ Correct
Correct!
```

4. What can you do if you have a problem with overplotting in a scatter plot?

1/1 point

Add transparency to the points by modifying the alpha value in the geom_point() function.

✓ Correct

Correct! You can modify the "alpha" and this will give a sense for the density of points.

Use geom_jitter() to add random noise to the x and y values of the point.

✓ Correct

Correct! You can use jitter to a give a sense for the density of points.

☐ In most instances, you can ignore overplotting because it doesn't change the distribution of the underlying data.

5. What does it mean to modify the binning of a histogram?

1 / 1 point

When you modify the bins, you are indicating how many groups you want continuous variables divided into for purposes of creating separate bars.

When you modify the bins, you are indicating how tall you want the highest value to be on the y-axis.

 $\bigcirc \ \ \ When you modify the bins, you are telling R how you want to fill and lines to look on the histogram.$

✓ Correct

Correct!