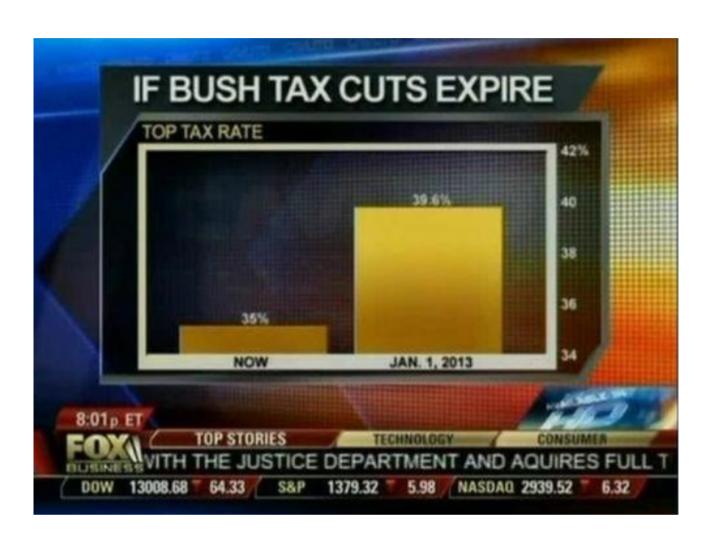
## **■** 12. Bad Visual Quizzes (Part I)

## **Practice, Practice, Practice**

It is time to put your new skills in data visualization to practice. See if you can figure out the questions below!



The plot above from Fox News claims to depict the change in the top tax rate bracket between the current level at the time, and after tax cuts were to expire. What is the lie factor for this chart? Some numbers to help: the small bar is 27 pixels tall and the large bar is 146 pixels tall.

O 4.57

○ 33.54

 $\bigcirc$  1

○.03

Believe it or not, the next two plots are of the exact same data. Both of them depict information regarding flights of the USA's Space Shuttle program: whether or not a mechanical failure of O-Ring components occurred, as well as the temperature at the time of flight. A full background of the dataset can be found <a href="here">here</a>.

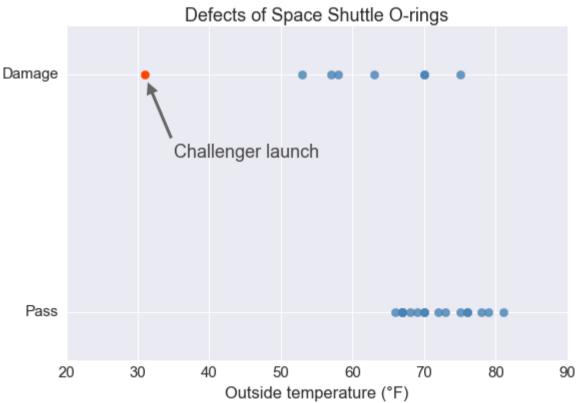
Use these two plots to answer the quiz questions that follow.

## 

IMPORMATION ON THIS PAGE WAS PREPARED TO SUPPORT AN ORAL PRESENTATION AND CANNOT BE CONSIDERED COMPLETE WITHOUT THE DRAL DISCUSSION

Plot 1

\_\_\_\_\_



Plot 2

\_\_\_\_\_

○ Plot 1	
○ Plot 2	
Use either of the two plats above to mark all the below that are true	
Use either of the two plots above to mark all the below that are true.	
$\square$ Temperature appears to be associated with whether an O-ring is damaged or will pass.	
$\Box$ If the temperature is lower than 60 degrees F, no O-rings have ever passed.	
☐ The <b>challenger</b> had the lowest temperature of any O-ring on record.	
☐ There are 7 total damaged O-rings in the dataset.	
What is the main data visualization violation for the first visual?	
O Data Integrity	
○ High Data-Ink Ratio	
○ Chart Junk	
○ Nothing, it is okay "as is".	
	Next Concept