

Attendance Quiz 15

Name: _____ Date: _____

1. Listed below are ages of motorcyclists when they were fatally injured in traffic crashes (based on data from the U.S. Department of Transportation). Find the sample mean \bar{x} , the median, the mode, standard deviation s , variance s^2 .

38 27 14 18 34 16
40 20 23 31 30 21

I think that this table will be helpful.

x	x ²	x - \bar{x}	(x - \bar{x}) ²
38			
27			
14			
18			
34			
16			
40			
20			
23			
31			
30			
21			
$\sum x =$	$\sum x^2 =$	$\sum (x - \bar{x}) =$	$\sum (x - \bar{x})^2 =$

Recall for formulas for single data set:

$$\bar{x} = \frac{\sum x}{n}$$

Try to find sample standard deviation using two different formulas.

$$s = \sqrt{\frac{\sum (x - \bar{x})^2}{n - 1}} \qquad s = \sqrt{\frac{\sum x^2 - n\bar{x}^2}{n - 1}} \text{ shortcut formulas}$$