Quiz 1 MATH 1550 Fall 2018

Find mean, median, mode, + standard deviation of the following data set:

3, 2, 10, 4, 2

<u>Solution</u>: First,

$$\text{mean} = \mu = \frac{3+2+10+4+2}{5}$$

$$= \frac{21}{5}$$

mode = 2

<u>median</u>

First order the data: 2, 2, 3, 4, 10

median

Standard deviation:

$$\sigma = \sqrt{\frac{\left(2-\frac{21}{5}\right)^2+\left(2-\frac{21}{5}\right)^2+\left(3-\frac{21}{5}\right)^2+\left(4-\frac{21}{5}\right)^2+\left(10-\frac{21}{5}\right)^2}{5}}$$

$$= \sqrt{\frac{4.84+4.84+1.44+0.04+33.64}{5}}$$

$$= \sqrt{8.96}$$

$$= 2.99$$