

NAME _____

DATE _____

CENTRAL TENDENCY: Worksheet 2

Find the mean, median and mode for the following data.

1) 5, 20, 22, 11, 20

2) 75, 56, 93, 100, 100, 45, 56

3) 8, 8, 6, 5, 9, 9, 10, 9

4) 30, 31, 30, 33, 34, 31, 28

5) Robert has taken 3 tests. His scores were 80, 94, and 96. Robert must take one more test. What is the lowest score he can have to have an 88 mean average?

6) There were 5 homes that sold in St. Joe County last week.
They sold for: \$80,000 \$91,000 \$78,500 \$56,500 \$112,000
What were the mean, median and mode for these prices?

KEY

CENTRAL TENDENCY: Worksheet 2

Find the mean, median and mode for the following data.

- 1) 5, 20, 22, 11, 20

Mean: $(5 + 20 + 22 + 11 + 20) \div 5 = 78 \div 5 = 15.6$

Median: List from small to large. 5,11,**20**,20,22. Middle score is the median: **20**

Mode: Appears the most number of times: **20**

- 2) 75, 56, 93, 100, 100, 45, 56

Mean: $(75 + 56 + 93 + 100 + 100 + 45 + 56) \div 7 = 525 \div 7 = 75$

Median: List from small to large. 45,56,56,**75**,93,100,100. Middle score is the median: **75**

Mode: Appears the most number of times: **Two modes: 56 & 100**

- 3) 8, 8, 6, 5, 9, 9, 10, 9

Mean: $(8 + 8 + 6 + 5 + 9 + 9 + 10 + 9) \div 8 = 64 \div 8 = 8$

Median: List from small to large. 5,6,8,**8,9**,9,9,10. Median is between 8 & 9: **8.5**

Mode: Appears the most number of times: **9**

- 4) 30, 31, 30, 33, 34, 31, 28

Mean: $(30 + 31 + 30 + 33 + 34 + 31 + 28) \div 7 = 217 \div 7 = 31$

Median: List from small to large. 28,30,30,**31**,31,33,34. Middle score is the median: **31**

Mode: Appears the most number of times: **Two modes: 30 & 31**

- 5) Robert has taken 3 tests. His scores were 80, 94, and 96. Robert must take one more test. What is the lowest score he can have to have an 88 mean average?

$$\frac{80 + 94 + 96 + x}{4} = 88 \implies \frac{270 + x}{4} = 88 \implies \begin{array}{l} \text{Multiply by 4. Subtract 270.} \\ x = 82 \end{array}$$

- 6) There were 5 homes that sold in St. Joe County last week.

They sold for: \$80,000 \$91,000 \$78,500 \$56,500 \$112,000

What were the mean, median and mode for these prices?

Mean: $(80000 + 91000 + 78500 + 56500 + 112000) \div 5 = 418,000 \div 5 = \$83,600$

Median: List from small to large. 56500,78500,**80000**,91000,112000.

Middle score is the median: **\$80,000**

Mode: Appears the most number of times: **No mode**