

Lesson 7-1

Objective - Given a set of data, find the mean, median and mode.

$$\text{Mean} = \frac{\text{Sum of the numbers}}{\# \text{ of the numbers}}$$

Median = Middle of the Numbers

Mode = Number which occurs most often

10, 10, 15, 20, 25

$$\text{Mean} = \frac{10 + 10 + 15 + 20 + 25}{5} = \frac{80}{5} = 16$$

$$\text{Median} = 15$$

$$\text{Mode} = 10$$

10 20 20 30 40

Range = Highest Value - Lowest Value

$$\text{Range} = 40 - 10$$

$$\text{Range} = 30$$

5 15 15 15 30

$$\text{Mean} = \frac{5 + 15 + 15 + 15 + 30}{5} = \frac{80}{5}$$

$$\text{Mean} = 16$$

Median = Middle of the Numbers

$$\text{Median} = 15$$

Mode = Number which Occurs Most Often

$$\text{Mode} = 15$$

Find the mean, median, mode.

21 14 12 13 7 11

7 11 12 13 14 21

$$\text{Mean} = \frac{\text{sum}}{\#} = \frac{78}{6} = 11$$

Median = Middle of the Numbers

$$\frac{12 + 13}{2} = 12.5$$

Mode = Number which Occurs Most Often

$$\text{No mode}$$

Find the mean, median, mode.

24 24 18 16 13 19 17

13 16 17 18 19 24 24

$$\text{Mean} = \frac{\text{sum}}{\#} = \frac{131}{7} \approx 18.7$$

$$\text{Mean} \approx 18.7$$

Median = Middle of the Numbers

$$\text{Median} = 18$$

Mode = Number which Occurs Most Often

$$\text{Mode} = 24$$

Find the mean, median, mode, and range.

84 96 84 95 101 62

62 84 84 95 96 101

$$\text{Mean} = \frac{\text{sum}}{\#} = \frac{522}{6} = 87$$

Median = Middle of the Numbers

$$\text{Median} = \frac{84 + 95}{2} = 89.5$$

Mode = Number which Occurs Most Often

$$\text{Mode} = 84$$

Range = High - Low

$$101 - 62 = 39$$

Lesson 7-1 (cont.)

Find the mean, median, mode, and range.

12 74 74 82 82 96

$$\text{Mean} = \frac{\text{sum}}{\#} = \frac{420}{6} = \underline{70}$$

Median = Middle of the Numbers

$$\text{Median} = \frac{74 + 82}{2} = \underline{78}$$

Mode = Number which Occurs Most Often

$$\text{Mode} = \underline{74 \text{ and } 82}$$

Range = High - Low

$$96 - 12 = \underline{84}$$

Find the missing number below given the mean, median or mode.

1) 3 5 6 7 x Mean = 5

$$\text{Mean} = \frac{\text{sum}}{\#}$$

$$5 = \frac{3+5+6+7+x}{5}$$

$$\text{(5)} 5 = \frac{21+x}{\cancel{5}} \text{(5)}$$

$$25 = 21 + x$$

$$\begin{array}{r} -21 \quad -21 \\ \hline 4 = x \end{array}$$

Find the missing number below given the mean, median or mode.

2) 3 4 4 x 10 10 11 12 Median = 8

Median = Mean of two middle numbers = $\frac{\text{sum}}{\#}$

$$8 = \frac{x+10}{2}$$

$$\text{(2)} 8 = \frac{x+10}{\cancel{2}} \text{(2)}$$

$$16 = x + 10$$

$$\begin{array}{r} -10 \quad -10 \\ \hline 6 = x \end{array}$$

Find the missing number below given the mean, median or mode.

3) 3 7 6 7 x 8 8 5 Mode = 7

Mode = Number that occurs most

$$\underline{x = 7}$$