

Math 2201 Worksheet

Sec 5.1: Exploring Data

Sec 5.2: Frequency Distribution

1. The high temperatures, in degrees Fahrenheit, for a 7-day week in Chicago are: 29°, 31°, 28°, 32°, 29°, 27°, and 55°.
 - a). What is the **mean** temperature for the week? 33°
 - b). What is the **median** of the temperatures? 29°
 - c). Between the mean and the median, which measure provides the best representation of the data? Explain.

The median, because the mean is affected by the outlier temperature of 55°.

2. The prices of six different models of printers in a computer store are \$299, \$349, \$495, \$329, \$198, and \$375. What is the median price?

Median = \$339 Don't forget to arrange numbers in order!

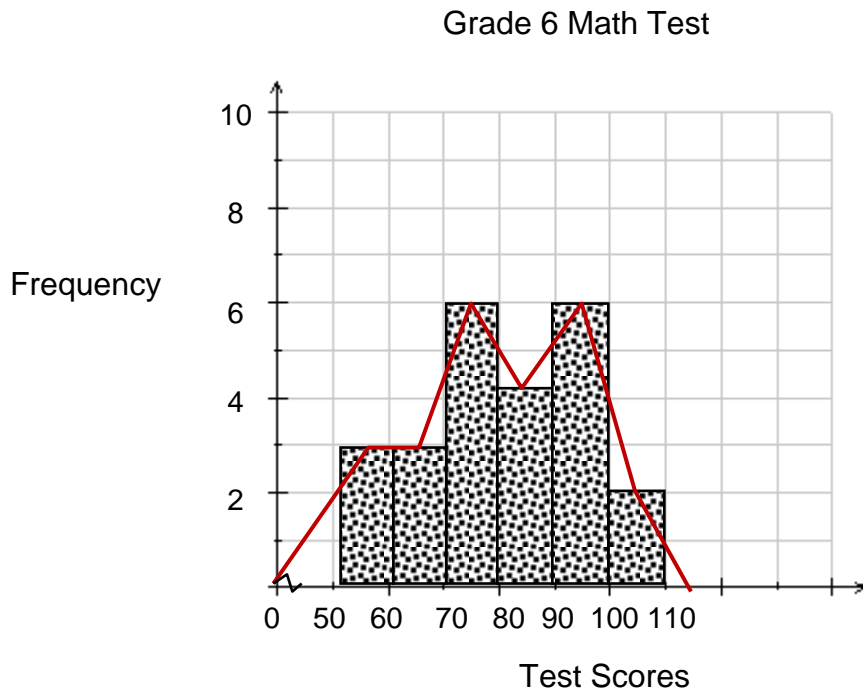
3. The following were geometry test scores for Ms. Jones grade 6 math class.

56	66	75	77	91	100
100	93	58	74	82	61
69	93	94	79	59	89
77	79	84	86	97	93

- a). Organize that data into a frequency table.

Test Score Intervals	Tally	Frequency
50 – 60		3
60 – 70		3
70 – 80	 	6
80 – 90		4
90 – 100	 	6
100 - 110		2

b). Draw a histogram to display the test scores.



c). Draw a frequency polygon for the test scores.

d). Determine the measures of central tendency for the test scores. Which measure(s) best represents the data? Explain

$$\text{Mean} = \frac{1932}{24} = 80.5\%$$

$$\text{Median} = \frac{79 + 82}{2} = 80.5\%$$

$$\text{Mode} = 93\%$$

The mean and the median best represent the data. They tend to fall in the center of the test scores.

e). What is the range of the test scores? What does this value mean?

The range is $100 - 56 = 44$. This is the difference between the highest and lowest marks. It means the test scores are spread out over 44 marks.