

Statistics and Probability

KEY

Give the mean, median, and mode for the data set.

- 1) A group of students score on a test as follows: 78, 97, 81, 88, 62, 92, 81.

$$\text{Mean} = \frac{78+97+81+88+62+92+81}{7} = 82.7 \text{ points}$$

Median: 62, 78, 81, 81, 88, 92, 97 The Median = 81

Mode = 81

- 2) John's rushing totals for the last seven football games are as follows: 123, 96, 145, 108, 88, 161, 104

A stained glass window has eighteen panes. Four are red, five are blue, seven are gold, and two are orange. A little boy hits a baseball through one of the panes. Give the answer as a fraction, a decimal, and a percentage.

- 3) What is the probability the pane is red?

- 4) What is the probability the pane is blue?

$$\text{Probability} = 4/18 = 2/9 = .22 = 22\%$$

- 5) What is the probability the pane is gold or blue?

- 6) What is the probability the pane is orange or red?

$$\text{Probability} = 12/18 = 2/3 = .67 = 67\%$$

- 7) John parks his car in the lot with 7 other cars. Lightning strikes a car in the parking lot. What is the probability that it was John's car that was struck? Give the answer as a fraction, a decimal, and a percentage.

$$\text{Probability} = 1/8 = .13 = 13\%$$