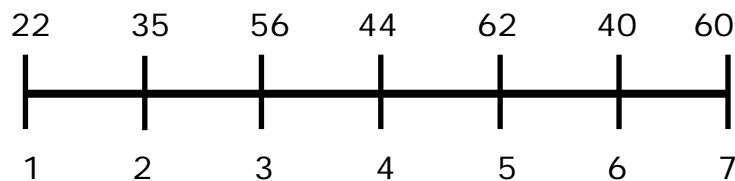## The Measure of Center of Data Sets - Step-by-Step Lesson

Lesson 1 Statistics Problem:

1. Foster sold cakes. He sold the following number of cakes over the last 7 days: 22, 35, 56, 44, 62, 40, 60.

a. How many cakes were sold in the last 7 days?

b. What was the average number of cakes sold each day? What is the median of the data set?

c. What is the range of the data?

22	35	56	44	62	40	60
1	2	3	4	5	6	7

Explanation:

a) We count how many cakes were sold in the last 7 days.

22 + 35 + 56 + 44 + 62 + 40 + 60 = 319 cake

Answer is: 319 cakes

b) The "mean" is the "average". To find the mean, we add up the total number of cakes that were sold and then divide by the number of days.

$$\text{Mean} = \frac{\text{Sum of elements in set}}{\text{Number of element in set}}$$

mean $= \dfrac{319}{7}$

$\dfrac{319}{7} = 45.57$

The "median" is the "middle" value in the list of numbers. To find the median, your numbers have to be listed in numerical order, so you may have to rewrite your list first.

22, 35, 40, 44, 56, 60, 62

Median $= \dfrac{\text{Number of elements in set} + 1}{2}$

Median $= \dfrac{7+1}{2} = \dfrac{8}{2} = 4$

(This means it is the data listed at the fourth position)

22, 35, 40, **44**, 56, 60, 62

Median is 44.

c) The "range" is just the difference between the largest and smallest values.

Range = 62 - 22 = 40