

Name: Class:

Mean, median, mode, and range: find the missing number

$$\frac{n}{t} = \text{mean}$$

 Where: **n** is the sum of numbers in the set.
t is the total number of numbers.

1. Rita has the following set of data.

(6, f, 4, 6)

Find f when the mean is 6.

2. Daniel has the following set of data

(10, 4, 10, p)

Find p when the mean is 10.

3. Lily has the following data set

(28, 24, X, 22, 27)

If the mean is 24.6, which number could X be?

4. Derick was given the data below to find the missing number.

(9, 3, 3, 9, 9, 7, U)

If the mode is strictly 9, which number could U be?

5. Yesterday, Nadia was given the following data set.

(118, 120, 219, 200, 118, 170, C, 170,)

If the mode is strictly 170, which number could C be?

6. In the data set below, find the missing number if the range is 17.

(18, 17, 18, 18, 29, 23, D)

12

36

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Where: **n** is the sum of numbers in the set.
t is the total number of numbers.

1. Rita has the following set of data.

(6, f, 4, 6)

Find f when the mean is 6.

When calculating the mean, we add all the numbers and divide by total number of numbers
Let's substitute the data in to the formula.

$$\frac{n}{t} = \text{mean} \longrightarrow \frac{(6+f+4+6)}{4} = 6$$

$$\frac{16 + f}{4} = \frac{6}{1} \longrightarrow \begin{aligned} 16 + f &= 24 \\ f &= 24 - 16 \\ f &= 8 \end{aligned}$$

So, f = 8 when the mean is 6

2. So, p = 16 when the mean is 10.

3. So, x = 22 when the mean is 24.6.

4. So, u = 9 when the mode is 9.

5. So, c = 170 when the mode is 170.

6. So, d = 12 when the range is 17.