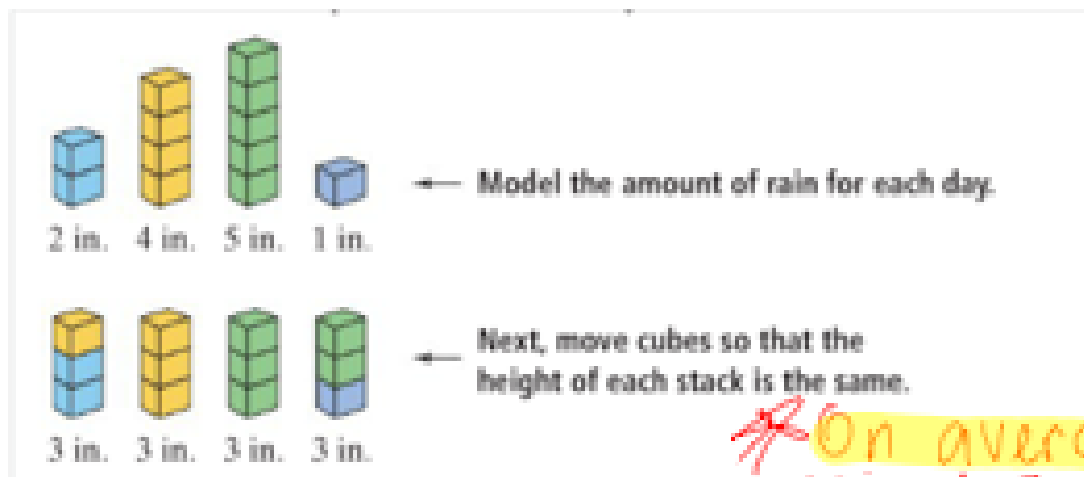Name_____Date_____

Finding the Mean

Vocabulary:

Measure of Center: A value that seems typical for a data distribution. This value summarizes the data set values with a single value.

The **mean**, or average, is one way to measure the center of a data set. It can be thought of as a balance point.

Using a Model to Find the Mean:

On four days it rained 2 inches, 4 inches, 5 inches, and 1 inch. Find the mean amount of rain.

2 in.   4 in.   5 in.   1 in.   ← Model the amount of rain for each day.

3 in.   3 in.   3 in.   3 in.   ← Next, move cubes so that the height of each stack is the same.

The mean amount of rain is ___*3 inches*___.

On average, it rained 3 inches each day.

You Try:
Use a model to find the mean of 3, 6, 3, 4, 2, and 6.

add ⟵

Calculating the Mean:

equal
even columns
to in shape ⟶

Find the sum of all of the data values and then divide by how many data values there are.

Calculating the Mean:

You keep track of the time you spend doing homework each evening. You spend 58 minutes, 36 minutes, 44 minutes, and 37 minutes.

Find the mean of these times.

$$\text{sum} = 58 + 36 + 44 + 37$$
$$= 175$$

$$\text{mean} = 175 \div 4$$
$$= 43\frac{3}{4} = 43.75$$

On average, the student spent 43¾ minutes on HW each night.

Side:
58
36
44
37
―――
175

Side: 43.75

43.75
4) 175.00
  -16
  ―――
   15
   12
   ―――
    3

Give it a Try..

The <mark>mean of 4 numbers is 7.</mark> Three of the numbers are <mark>4, 7, and 7.</mark> What is the <mark>fourth</mark> number? Explain your reasoning.

4   7   7   ?

mean = 7

$$7 \times 4 = \boxed{28} \text{ Total}$$

$$4 + 7 + 7 = 18$$

$$28 - 18 = 10$$

10 is the 4th number.