9 Averages and range – Part 1

Name: _____ Class: _____ Date: _____

Vocabulary

Write each word three times.

English	**Write it 3 times** (English)		
average			
mean			
median			
mode			
range			

Recall

An **average** is a single value that represents a set of data. There are three kinds, plus the range.

New ideas

Read these first, then do the Practice.

1 Mean, median, mode

median $= 3$

$$\text{mean} = \frac{2+3+3+5+7}{5} = 4$$

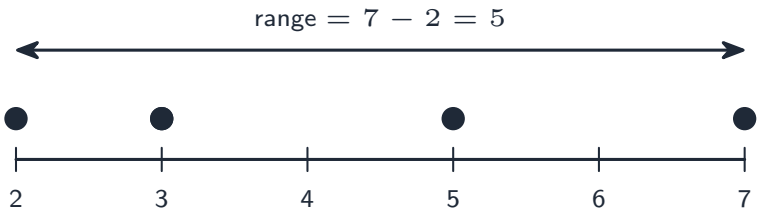
mode $= 3$ (most common)

range $= 7 - 2 = 5$

- **mean** = add all the values, then divide by how many there are;
- **median** = the middle value (put the data in order first);
- **mode** = the most common value.

2 The range

The **range** measures the **spread**: largest − smallest.



Watch out: put the data **in order** before finding the **median** (the middle value). The **mean** uses *all* the values (add, then divide by how many); the **range** (largest − smallest) measures *spread*, not an average.

Practice

Use the data $4, 6, 6, 8, 11$ for the first four questions.

9.1 Find the mean of $4, 6, 6, 8, 11$. [2]

9.2 Find the median of $4, 6, 6, 8, 11$. [1]

9.3 Find the mode of $4, 6, 6, 8, 11$. [1]

9.4 Find the range of $4, 6, 6, 8, 11$. [1]

9.5 What does the range tell you about a set of data? [1]

9.6 Challenge. Five numbers have a mean of 8. Four of them are $6, 9, 7, 10$. Find the fifth number. [3]