

9 Averages and range – Part 1

Name: _____ Class: _____ Date: _____

Vocabulary 词汇

Write each word three times. 把每个单词抄写三遍。

English	中文	Write it 3 times (English)
average	平均数	_____
mean	平均值	_____
median	中位数	_____
mode	众数	_____
range	极差	_____

Recall

An **average** 平均数 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

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

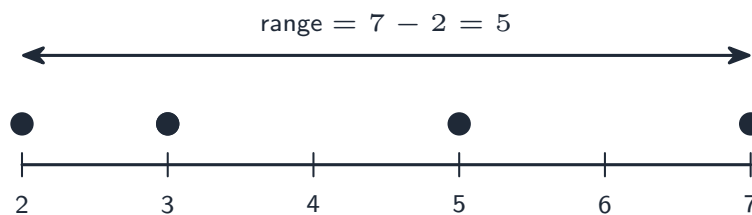
mode = 3 (most common)

$$\text{range} = 7 - 2 = 5$$

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

■ 2 The range

The **range** 极差 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]