



## Quick Review

The median of a data set is the middle number when the data are arranged in order.

The range of a data set tells how spread out the data are.

It is the difference between the greatest and the least numbers in the set.

- Sofia caught 7 rainbow trout.

She listed the lengths, in centimetres, from least to greatest:

37, 39, 39, 40, 43, 44, 44

The middle number is 40. The median length is 40 cm.

- Sofia caught 1 more trout. It was 42 cm long.

To find the new median, Sofia inserted the number in its correct position in the ordered list:

37, 39, 39, 40, 42, 43, 44, 44

Now there are two middle numbers: 40 and 42

The median is the mean of the two middle numbers:

$$(40 + 42) \div 2 = 41$$

The median length is now 41 cm.

- The range of the lengths is:  $44 \text{ cm} - 37 \text{ cm} = 7 \text{ cm}$

Tip

The median is another measure of central tendency.

## Practice

1. Arrange the numbers in each set from least to greatest.

Then, find the median and the range.

- a) 12, 18, 27, 9, 42

From least to greatest: \_\_\_\_\_

Median: \_\_\_\_\_

Range: \_\_\_\_\_

- b) 87, 76, 93, 74, 67, 91, 79

From least to greatest: \_\_\_\_\_

Median: \_\_\_\_\_

Range: \_\_\_\_\_

- c) 55, 45, 62, 71, 74, 58, 66, 58, 47

From least to greatest: \_\_\_\_\_

Median: \_\_\_\_\_

Range: \_\_\_\_\_

d) 17, 12, 18, 14, 16, 11  
From least to greatest: \_\_\_\_\_

Median: \_\_\_\_\_ Range: \_\_\_\_\_

e) 44, 62, 17, 38, 59, 53, 48, 38  
From least to greatest: \_\_\_\_\_

Median: \_\_\_\_\_ Range: \_\_\_\_\_

2. Find the median and the range of these amounts: \$10, \$14, \$9, \$11, \$7, \$12

Median: \_\_\_\_\_ Range: \_\_\_\_\_

3. a) Measure the arm spans and the strides of 5 people, to the nearest centimetre.  
Record your data in the table.

Name	Arm Span (cm)	Stride (cm)

b) What is the median arm span? \_\_\_\_\_

c) What is the median stride? \_\_\_\_\_

d) What is the range of the arm spans? \_\_\_\_\_

e) What is the range of the strides? \_\_\_\_\_

f) Measure one more person.

What is the new median arm span? \_\_\_\_\_

What is the new median stride? \_\_\_\_\_

g) Has the range of arm spans changed? If so, what is the new range? \_\_\_\_\_

Has the range of strides changed? If so, what is the new range? \_\_\_\_\_

4. This list shows the numbers of books 12 students read over the summer:

8, 4, 13, 2, 4, 3, 5, 17, 7, 12, 4, 5

Find each measure:

a) mean: \_\_\_\_\_

b) median: \_\_\_\_\_

c) mode: \_\_\_\_\_

d) range: \_\_\_\_\_