6 RATIO

White Rose Maths

1 Complete the sentences.

For every 1 apple, there are ☐ pears.

For every 3 oranges, there are ☐ bananas.

2

Complete the sentence.

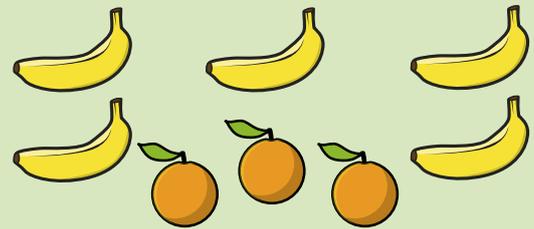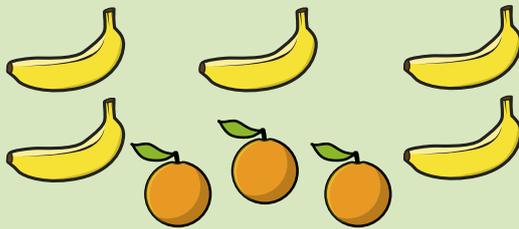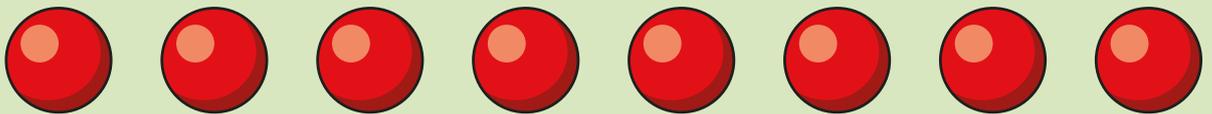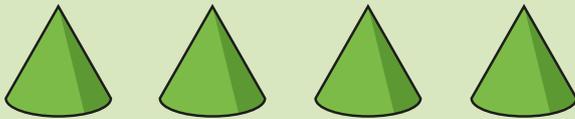For every 1 cone, there are ☐ spheres.

3 Alex has these coins.

(eight 1p coins)

Jack has these coins.

(twelve £1 coins)
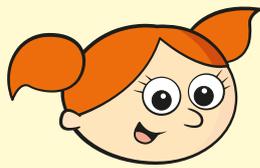
For every 4 coins I have got, Jack has got 6 coins.

Is Alex correct? _____

Explain your answer.

4
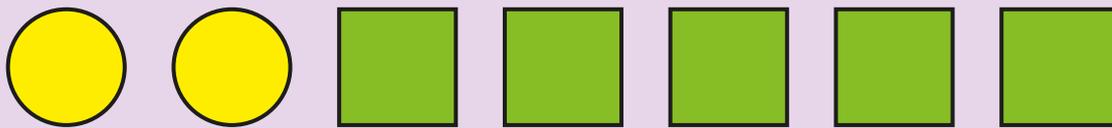
The ratio of circles to squares is ☐ : ☐

Complete the sentence in two different ways.

The ratio of rectangles to triangles is ☐ : ☐

The ratio of rectangles to triangles is ☐ : ☐

5 Circle the equivalent ratios.

$$4:6 \qquad 6:4 \qquad 2:3 \qquad 1:3 \qquad 6:9$$

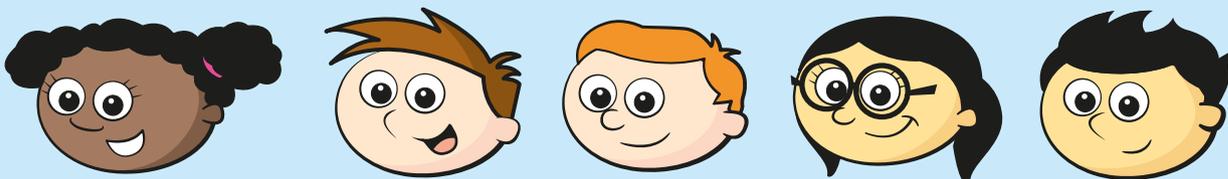**6** Part of a bar is shaded.

What fraction of the bar is shaded?

What is the ratio of shaded parts to
non-shaded parts? _____

7 For every 3 boys in a class, there are 2 girls.

There are 30 children in the class.
How many girls are there?

8 The ratio of red to blue cubes in a tower is 1 : 6

There are 9 red cubes in the tower.
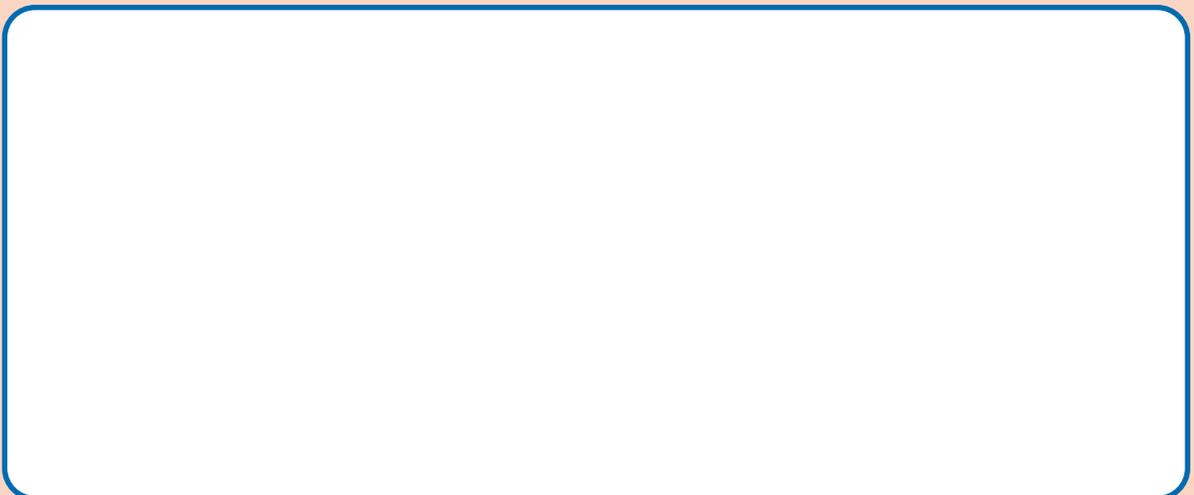
How many blue cubes are there in the tower?

9 Aisha has some red and green grapes.

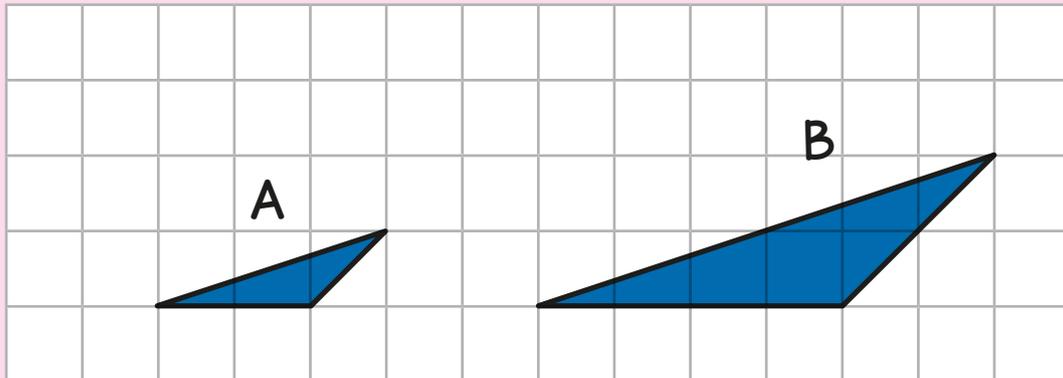For every 4 green grapes, she has 7 red grapes.

She has 20 green grapes.

How many more red grapes than green grapes does Aisha have?
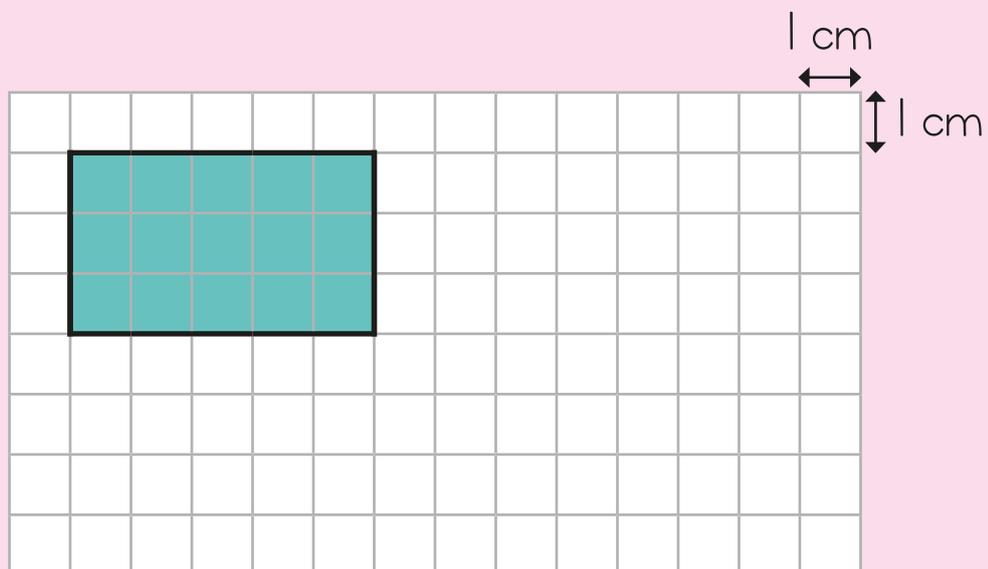
10 Here are two triangles.

Triangle B is an enlargement of Triangle A.

What is the scale factor of enlargement?

11 A field is drawn to scale.

1 cm on the grid represents 6 metres in real life.

1 cm

1 cm

What is the length of the field? ⬜ m

Another field is 12 m long and 9 m wide.
Draw this field on the grid.

Answers

1 For every 1 apple, there are **3** pears.
For every 3 oranges, there are **5** bananas.

2 For every 1 cone there are **2** spheres.

3 Yes, because Alex has 8 coins and Jack has 12, so for every 4 Alex has, Jack has 6

4 The ratio of circles to squares is **2 : 5**
The ratio of rectangles to triangles is **2 : 4**
The ratio of rectangles to triangles is **1 : 2**

5 (4 : 6)   (2 : 3)   (6 : 9)

6 $\frac{2}{5}$ 2 : 3

7 12 girls

8 54 blue cubes

9 15 more red grapes

10 2

11 30 m