

Ratio

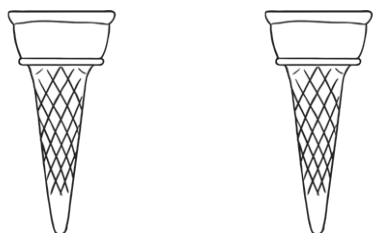
A ratio is the comparison between two or more quantities. You can remember this by using 'for every', such as '4 for every 2'. This can be written as 4:2.



There are 4 scoops of ice cream in a cone. This tells me '4 scoops of ice cream for every 1 cone' so gives me a ratio of 4:1.

1

How many scoops of ice cream will there be if there are 2 cones? Draw them on the cones.



2

Can you write the ratio of ice cream to cone for 2 cones?

3

How many scoops of ice cream will there be if there are 3 cones? Draw them on the cones.



4 Can you write the ratio of ice cream to cone for 3 cones?

5 Do you notice any patterns in the amount of scoops for one cone, two cones and three cones? Can you use this to predict the ratio for four cones?

Ratio - Answers

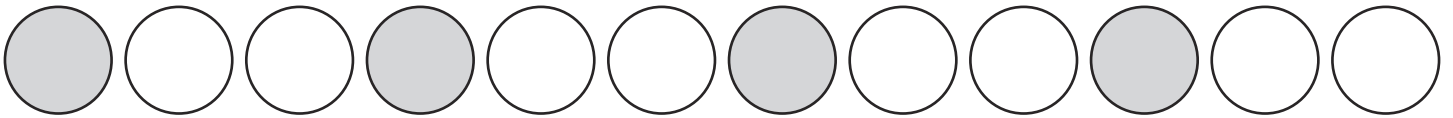
1. How many scoops of ice cream will there be if there are 2 cones? Draw them on the cones. **8**
2. Can you write the ratio of ice cream to cone for 2 cones? **8:2**
3. How many scoops of ice cream will there be if there are 3 cones? Draw them on the cones. **12**
4. Can you write the ratio of ice cream to cone for 3 cones? **12:3**
5. Do you notice any patterns in the amount of scoops for one cone, two cones and three cones? Can you use this to predict the ratio for four cones?

I notice that I am using the multiplication facts for the 4 times tables when calculating the amount of scoops per cone. I predict for 4 cones, I would need 4 lots of 4 scoops, which is a total of 16 scoops.

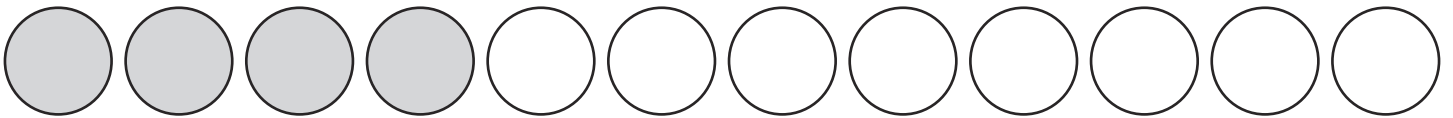
Proportion

A proportion is a part of a whole. You can remember this by using 'in every', such as '1 part in every 5 parts'. You can write this as 1:5.

Here are 12 circles. 1 in every 3 circles are shaded. The proportion is 1:3 or $\frac{1}{3}$.



By rearranging the circles, I can see the proportion in a different way.



1 Here are 15 squares. Colour 1 in every 5 squares below.



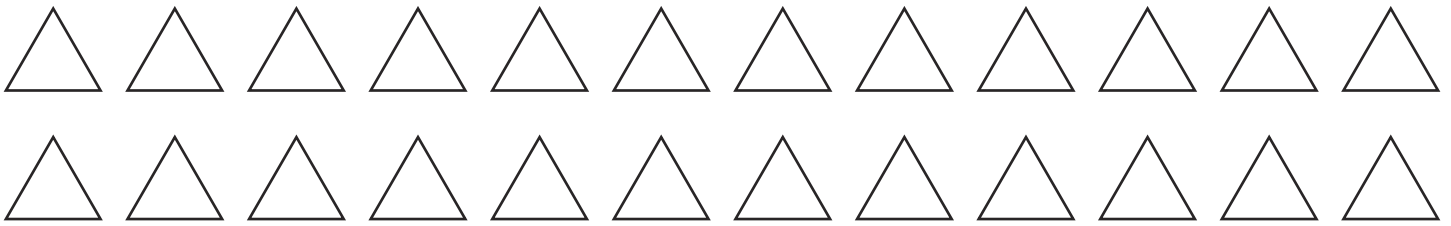
2 1 in every _____ squares are coloured in.

The proportion is ____ : ____

3 Can you rearrange the squares to see the proportion in a different way?



Here are 24 triangles. Colour 1 triangle in every 6 triangles below.



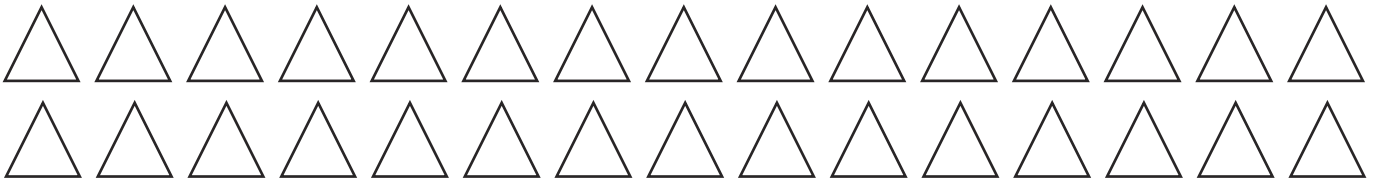
4

Can you write the proportion of coloured triangles?

_____ : _____

5

Can you rearrange the triangles to see the proportion in a different way?

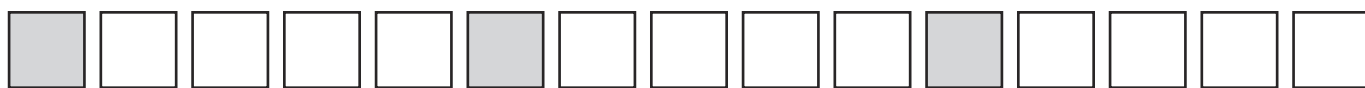


6

d) Do you notice any patterns in the amount of triangles shaded compared to not shaded? Can you use this to predict the proportion shaded if there were 30 triangles?

Proportion - Answers

1. Here are 15 squares. Colour 1 in every 5 squares below.



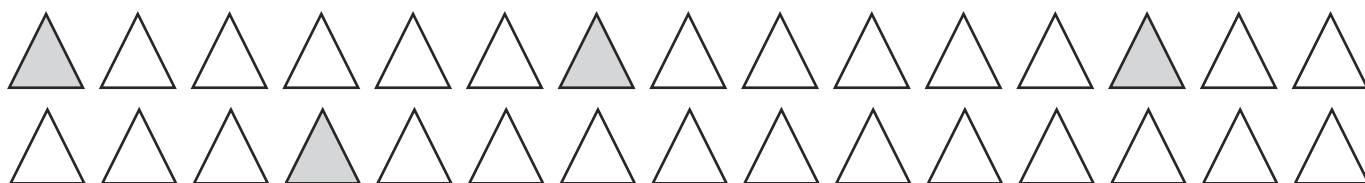
2. 1 in every 5 squares are coloured in.

The proportion is **1 : 5**

3. Can you rearrange the squares to see the proportion in a different way?

Pupils' answers may vary but should show 3 different shaded squares.

4. Here are 24 triangles. Colour 1 triangle in every 6 triangles below.



5. Can you write the proportion of coloured triangles? **1 : 6**

6. Can you rearrange the triangles to see the proportion in a different way?

Pupils' answers may vary but should show 4 different shaded triangles.

7. Do you notice any patterns in the amount of triangles shaded compared to not shaded? Can you use this to predict the proportion shaded if there were 30 triangles?

I notice that I am using the multiplication facts for the 6 times table when calculating the proportion of shaded parts. I predict that if there were 30 triangles, 5 would be shaded as 30 divided by 6 equals 5.