

Ratio

Key Vocabulary

Ratio — Comparison of two amounts e.g, 3 cats to 4 dogs

Proportion— The fraction of the total amount

Simplify—To express a ratio in the smallest whole values possible by dividing each ratio by the same amount.

Part — How many a number has been split into.

Expressing a number as a ratio

The ratio of squares to triangles is 2:3

The ratio of triangles to squares is 3:2



Expressing a number as a proportion

The proportion of squares is $\frac{2}{5}$
(It is out of the total amount of shapes or parts)

Dividing Ratios

Divide 240 in the ratio 3:5



3 parts

5 parts

8 parts in total

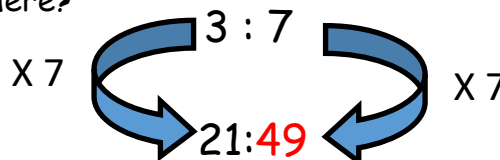
1 part = $240 \div 8 = 30$

Blue = 3 parts = $30 \times 3 = 90$

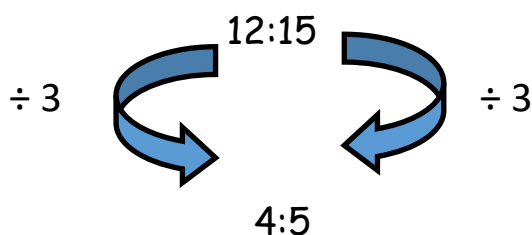
Yellow = 5 parts = $30 \times 5 = 150$

Scaling a ratio

The ratio of cows to sheep is 3:7. If there are 21 cows, how many sheep are there?



Simplifying ratio

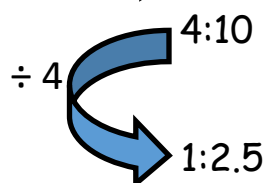


The numbers may not simplify to 1

Writing ratios in the form 1:n



This gives a whole number answer for both ratios



This examples gives a decimal for one of the ratios.

Finding amounts from a given ratio

A sum of money is divided between Kate and Jo in the amount 4:5. If Jo gets £80, how much does Jo get?

5 parts = £80

1 part = $£80 \div 5 = £16$

Kate has 4 parts = $£16 \times 4 = £64$