

How to ...

Colin, Dave and Emma share some money.

Colin gets $\frac{3}{10}$ of the money.

Be careful about the 'order' of the names!

Emma and Dave share the rest of the money in the ratio 3:2

What is Dave's share of the money?

There are a couple of ways to tackle this question

Method 1:

C : D : E

$\frac{3}{10}$ so Dave + Emma = $\frac{7}{10}$ or 70%

70% is shared between

Emma & Dave in the ratio 3:2

$3+2=5$

$70\% \div 5 = 14\%$

$14\% \times 3 = 42\%$

28%

Dave gets 28%.

Another way is to use a sum of money... it makes sense to choose a nice number... say £100

Colin = $\frac{3}{10}$ of £100 = £30

Emma & Dave share £70

$3+2=5$ £70 ÷ 5 = £14

E : D

£14 × 3 : 2 × £14 (4)
£42 : £28

the question asked what share

$\frac{28}{100} = \frac{14}{50} = \frac{7}{25}$

Any of these are acceptable

Now have a go yourself ...

SORTED IT - share the following in the ratio shown

a) £40 in the ratio 3:2 b) £35 in the ratio 4:1

c) £54 in the ratio 5:1 d) £35 in the ratio 4:3

e) £42 in the ratio 2:5 f) £65 in the ratio 2:3

NAILED IT - share the following in the ratio shown

a) £30 in the ratio 2:2:1 b) £84 in the ratio 3:3:1

c) £990 in the ratio 7:2:2 d) £64 in the ratio 5:2:1

e) £240 in the ratio 5:3:2 f) £140 in the ratio 6:3:1

MASTERED IT

a) Mr A, Mr B and Mr C own 2, 3, and 6 parts of a business. They share the profit according to how many parts of the business they own. If Mr C gets £132 how much profit did the business make?

b) To make suet you need fat to flour in the ratio 1: 3. Jane has 180 g of flour. How much fat does she need to make the suet?

c) The sides of a triangle are in the ratio 2 : 4 : 5. The middle sized side is 28 cm.

a). Find the length of the other two sides.

b). Find the perimeter of the triangle.

Exam Questions

Q1. 5 schools sent some students to a conference. One of the schools sent boys and girls. This school sent 16 boys. The ratio of the number of boys it sent to the number of girls it sent was 1:2

The other 4 schools sent only girls.

Each of the 5 schools sent the same number of students.

Work out the total number of students sent to the conference by these 5 schools.

Q2. Last year Kerry's take home pay was £15 000 She spent 40% of her take home pay on rent.

She used the rest of her take home pay for living expenses, clothes and entertainment in the ratio 3 : 1 : 2

How much did Kerry spend on entertainment last year?

Q3. Talil is going to make some concrete mix. He needs to mix cement, sand and gravel in the ratio 1 : 3 : 5 by weight. Talil wants to make 180 kg of concrete mix. He has:

15 kg of cement

85 kg of sand

100 kg of gravel

Does Talil have enough cement, sand and gravel to make the concrete mix?

Ready to be marked ?

Checklist

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Answer checked

☐

Working out shown



Keywords



Things to remember ...



What went well ...

Teacher comment ..

