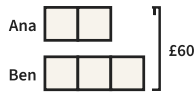


Interleaved: sharing in a ratio

ANSWERS

1

Share £60 between Ana and Ben in the ratio 2 : 3.



Which method? **Share a total**
 One part known Difference known
£60 is the total: 5 parts, £12 a part

Answer Ana £24, Ben £36

2

Red and blue beads are in the ratio 3 : 7. There are 28 more blue beads than red beads. How many red beads are there?

Which method? **Share a total**
 One part known **Difference known**
28 is the difference: 4 parts, 7 a part

Answer 21

3

Squash and water are mixed in the ratio 2 : 5. Ella uses 150 ml of squash. How much water does she use?

Which method? **Share a total**
 One part known Difference known

Answer 375 ml

4

£840 is shared between three charities in the ratio 1 : 2 : 4. How much does the largest share get?

Which method? **Share a total**
 One part known Difference known

Answer £480

5

Boys and girls in a year group are in the ratio 4 : 5. There are 45 girls. How many students are there altogether?

Which method? **Share a total**
 One part known Difference known

Answer 81

6

Kai and Lu share some money in the ratio 5 : 2. Kai gets £45 more than Lu. How much money is there altogether?

Which method? **Share a total**
 One part known **Difference known**

Answer £105

7

Cement and sand are mixed in the ratio 1 : 4 to make 35 kg of mortar. How much sand is used?

Which method? **Share a total**
 One part known Difference known

Answer 28 kg

8

Cats and dogs at a rescue centre are in the ratio 3 : 8. There are 24 dogs. How many cats are there?

Which method? **Share a total**
 One part known Difference known

Answer 9

Interleaved: sharing in a ratio *further practice*

ANSWERS

9

A team won gold and silver medals in the ratio 2 : 5. They won 12 more silver medals than gold. How many medals did they win altogether?

Answer 28

10

A plank 2.4 m long is cut into two pieces in the ratio 5 : 3. How long is the shorter piece, in centimetres?

2.4 m = 240 cm is the total
 Answer 90 cm

11

Flour, butter and sugar are mixed in the ratio 6 : 3 : 2. Dev uses 450 g of flour. How much sugar does he use?

Answer 150 g

12

The ages of Sam and his grandad are in the ratio 2 : 9. His grandad is 56 years older than Sam. How old is Sam?

Answer 16

13

Fiction and non fiction books in a library are in the ratio 7 : 4. There are 48 non fiction books. How many books are there altogether?

Answer 132

14

Three friends share a prize of £1500 in the ratio 2 : 3 : 7. How much more does the largest share get than the smallest?

Answer £625

15

Two numbers are in the ratio 4 : 9. Their difference is 35. Find their sum.

Answer 91

16

Paint is mixed blue to white in the ratio 2 : 3. Zoe has 12 litres of white paint. She says she needs $12 \div 5 \times 2 = 4.8$ litres of blue. Explain her mistake and find the right amount.

12 litres is one part of the ratio, the 3 parts of white, not the total: 4 litres a part
 Answer 8 litres