

Ratio: Finding a Missing Amount

ANSWERS

1 Start with the ratio.

Squash and water are mixed in the ratio 1 : 5. Sam uses 30 ml of squash. How much water does he need?

Squash	Water
1	5
30	150

$\times 30$

2

Red and blue paint are mixed in the ratio 3 : 4. Kai uses 12 litres of red. How much blue does she need?

Red	Blue
3	4
12	16

$\times 4$

3

Flour and butter are used in the ratio 5 : 2. Mo uses 250 g of flour. How much butter does he need?

Flour	Butter
5	2
250	100

$\times 50$

4

The ratio of cats to dogs at a rescue centre is 2 : 7. There are 8 cats. How many dogs are there?

Cats	Dogs
2	7
8	28

$\times 4$

5 Notice the change!

Sand and cement are mixed in the ratio 4 : 1. A builder uses 6 kg of cement. How much sand does she need?

Sand	Cement
4	1
24	6

$\times 6$

6

The ratio of adults to children on a trip is 2 : 9. There are 45 children. How many adults are there?

Adults	Children
2	9
10	45

$\times 5$

7

Gold and silver beads are used in the ratio 3 : 8. A necklace has 24 silver beads. How many gold beads does it have?

Gold	Silver
3	8
9	24

$\times 3$

Answer 9

8

Orange and mango juice are mixed in the ratio 7 : 3. Ali uses 350 ml of orange. How much drink does he make altogether?

Orange	Mango	Total
7	3	10
350	150	500

$\times 50$

Answer 500 ml

Ratio: Finding a Missing Amount further practice

ANSWERS

9

Gravel and sand are mixed in the ratio 5 : 2 to make a path. A builder uses 14 kg of sand. How much gravel and sand does she use altogether?

$\times 7$, gravel 35 kg, $35 + 14$

Answer 49 kg

10

The flowers in a display are red, white and blue in the ratio 2 : 3 : 5. There are 18 white flowers. How many red flowers and how many blue flowers are there?

$18 \div 3 = 6$, $\times 6$

Red	White	Blue
12	18	30

11

A recipe uses 3 cups of flour for every 2 eggs. Ben uses 12 eggs. How many cups of flour does he use?

$12 \div 2 = 6$, 3×6

Answer 18 cups

12

Squash and water are mixed in the ratio 1 : 6. Kim uses 250 ml of squash. How many litres of drink does she make?

7 parts of drink, $250 \times 7 = 1750$ ml

Answer 1.75 litres

13

The ratio of adults to children at a show is 3 : 8. There are 35 more children than adults. How many adults are there?

5 parts = 35, 1 part = 7

Answer 21 adults

14

The length and the width of this rectangle are in the ratio 5 : 2. Find the area of the rectangle.

$6 \div 2 = 3$, length $5 \times 3 = 15$ cm, 15×6

Answer 90 cm²

15

Mortar is made from sand and cement in the ratio 5 : 1. A builder has 40 kg of sand and 7 kg of cement. Does she have enough cement to use all the sand? Show how you know.

$40 \div 5 = 8$, 8 kg of cement needed

Answer No, she needs 8 kg

16

The ratio of boys to girls in a choir is 3 : 4. There are 12 girls. Kai says there are 11 boys, because 3 is one less than 4. Is Kai right? Explain.

$4 \times 3 = 12$, so $3 \times 3 = 9$

Answer No, there are 9 boys