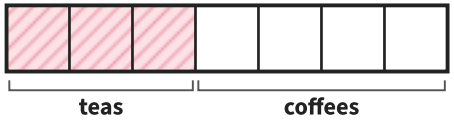
Ratios and fractions

ANSWERS

1

A café sells teas and coffees in the ratio 3 : 4. What fraction of the drinks are teas?

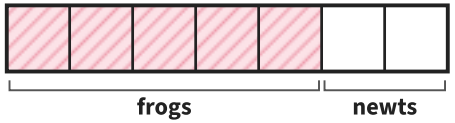


3 + 4 = 7 parts

$\text{teas} = \frac{3}{7}$

2

A pond has frogs and newts in the ratio 5 : 2. What fraction of the animals are frogs?

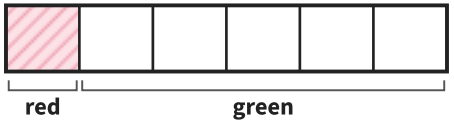


5 + 2 = 7 parts

$\text{frogs} = \frac{5}{7}$

3

A jar holds red and green buttons in the ratio 1 : 5. What fraction of the buttons are green?

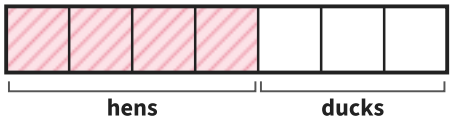


1 + 5 = 6 parts

$\text{green} = \frac{5}{6}$

4

A farm has hens and ducks in the ratio 4 : 3. What fraction of the birds are ducks?

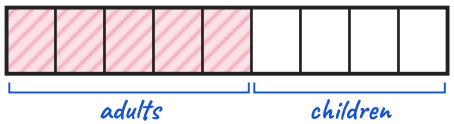


7 parts, 3 of them

Answer $\frac{3}{7}$

5

$\frac{5}{9}$ of the members of a book club are adults. The rest are children. Label the bar, then write the ratio of adults to children.



adults : children = 5 : 4

6

A fruit bowl has apples, pears and plums in the ratio 4 : 1 : 3. What fraction of the fruit are plums?



4 + 1 + 3 = 8 parts

Answer $\frac{3}{8}$

7

In a car park, the ratio of vans to cars is 1 : 4. Ali says $\frac{1}{4}$ of the vehicles are vans. Explain Ali's mistake. What fraction of the vehicles are vans?

4 is just the cars, 1 + 4 = 5 parts

Answer $\frac{1}{5}$

8

A garden centre has red and yellow pansies in the ratio 4 : 6. What fraction of the pansies are yellow? Give your answer in its simplest form.

4 + 6 = 10 parts, $\frac{6}{10} = \frac{3}{5}$

Answer $\frac{3}{5}$

Ratios and fractions *further practice*

ANSWERS

9

A bag has lemon sweets and lime sweets in the ratio 5 : 4. What fraction of the sweets are lime?

5 + 4 = 9 parts

Answer $\frac{4}{9}$

10

On a train, $\frac{7}{10}$ of the seats are taken. The rest are empty. Write the ratio of taken seats to empty seats.

10 − 7 = 3 parts empty

Answer 7 : 3

11

A flower bed has red, yellow and white tulips in the ratio 4 : 3 : 5.
What fraction of the tulips are red?
Give your answer in its simplest form.

4 + 3 + 5 = 12 parts, $\frac{4}{12} = \frac{1}{3}$

Answer $\frac{1}{3}$

12

In a cycling club, the ratio of adults to children is 5 : 6.
(a) What fraction of the members are adults?
(b) The number of adults is what fraction of the number of children?

(a) 5 out of 11 parts, (b) 5 out of 6

(a) $\frac{5}{11}$

(b) $\frac{5}{6}$

13

A 600 ml smoothie is made from milk and fruit in the ratio 2 : 3.
How many millilitres of fruit are in the smoothie?

$\frac{3}{5}$ of 600, 600 ÷ 5 = 120, 120 × 3

Answer 360 ml

14

(a) Write the ratio of shaded squares to unshaded squares.
(b) What fraction of the rectangle is unshaded?



12 squares, 5 shaded

(a) 5 : 7

(b) $\frac{7}{12}$

15

In a survey, the ratio of people who like tea to people who do not is 7 : 6.
Is it true that more than half of the people like tea? Show how you know.

7 + 6 = 13 parts, half of 13 is 6.5

Answer Yes, $\frac{7}{13}$ is more than half

16

On a shelf, the ratio of fiction books to non fiction books is 5 : 3. Mo says $\frac{3}{5}$ of the books are non fiction. Lin says $\frac{3}{8}$.
Who is right? What does Mo's fraction compare?

8 parts altogether,
$\frac{3}{5}$ is non fiction compared with fiction

Answer Lin