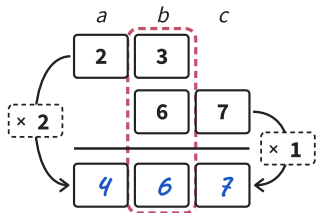


Combining Ratios

ANSWERS

1

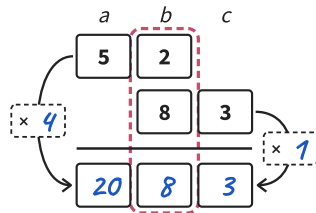
$a : b = 2 : 3$ and $b : c = 6 : 7$. Find $a : c$.



$a : c$ 4 : 7

2

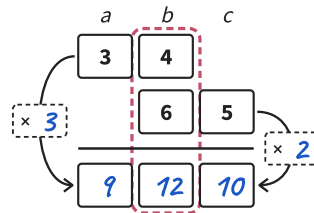
$a : b = 5 : 2$ and $b : c = 8 : 3$. Find $a : c$.



$a : c$ 20 : 3

3

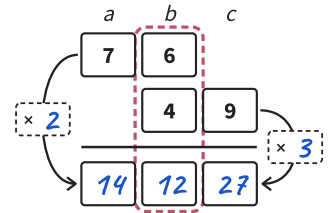
$a : b = 3 : 4$ and $b : c = 6 : 5$. Find $a : c$.



$a : c$ 9 : 10

4

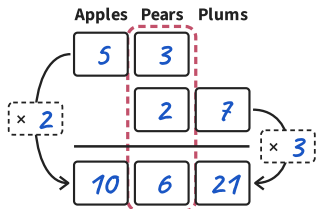
$a : b = 7 : 6$ and $b : c = 4 : 9$. Find $a : c$.



$a : c$ 14 : 27

5

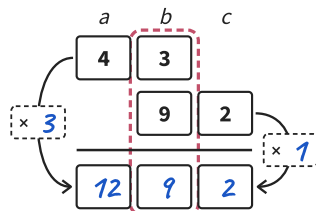
A fruit stall sells apples and pears in the ratio 5 : 3, and pears and plums in the ratio 2 : 7. Find the ratio of apples to plums.



Apples : Plums 10 : 21

6

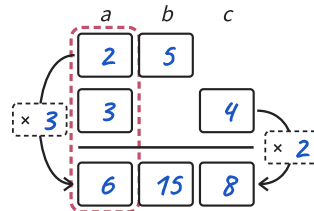
$a : b = 4 : 3$ and $b : c = 9 : 2$. Find $a : c$ in its simplest form.



$a : c$ 6 : 1

7

$a : b = 2 : 5$ and $a : c = 3 : 4$. Find $b : c$.



$b : c$ 15 : 8

8

A bag holds red, blue and green beads. Red : blue = 3 : 2 and blue : green = 3 : 4. There are 115 beads. How many are green?

Red : blue : green 9 : 6 : 8
Green 40 beads

Combining Ratios further practice

ANSWERS

9

$a : b = 4 : 5$ and $b : c = 3 : 2$. Find $a : b : c$ and $a : c$.

$a : b : c$ 12 : 15 : 10
 $a : c$ 6 : 5

10

A garden centre has roses and tulips in the ratio 5 : 2, and tulips and daisies in the ratio 3 : 4. Find the ratio of roses to daisies.

Roses : daisies 15 : 8

11

$p : q = 3 : 5$ and $r : q = 2 : 3$. Find $p : q : r$.

$p : q : r$ 9 : 15 : 10

12

In a pot of pens, blue : red = 2 : 3 and red : green = 4 : 5. There are 60 green pens. How many pens are in the pot?

Pens 140

13

$x : y = 5 : 6$ and $z : y = 7 : 9$. Find $x : z$.

$x : z$ 15 : 14

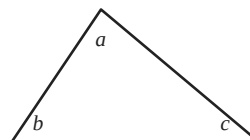
14

Ali has twice as many stickers as Ben. Ben and Cal have stickers in the ratio 3 : 4. Cal has 12 more stickers than Ben. How many stickers does Ali have?

Ali 72 stickers

15

The angles of a triangle are a , b and c . $a : b = 3 : 2$ and $b : c = 7 : 5$. Find the size of each angle.



a, b, c 84°, 56°, 40°

16

Who is right? Explain.

Sam
 $a : b = 2 : 3$ and $b : c = 3 : 4$, so $a : c = 1 : 2$.

Ali
 $a : b = 2 : 3$ and $b : c = 4 : 5$, so $a : c = 2 : 5$.

Sam: the b parts match
Ali: 8 : 15, not 2 : 5