Ratio and area

1

A rectangle has a perimeter of 40 cm.
Its length and width are in the ratio 3 : 1.
Find its area.



Length + width [20] cm, [4] parts

One part [5] cm, so [15] and [5] cm

Area [ ] cm²

Answer _____

2

A rectangle has a perimeter of 56 cm.
Its length and width are in the ratio 5 : 2.
Find its area.



Length + width [28] cm, [7] parts

One part [ ] cm, so [ ] and [ ] cm

Area [ ] cm²

Answer _____

3

A rectangle has a perimeter of 36 cm.
Its length and width are in the ratio 2 : 1.
Find its area.



Length + width [ ] cm, [ ] parts

One part [ ] cm, so [ ] and [ ] cm

Area [ ] cm²

Answer _____

4

A rectangle has a perimeter of 50 cm.
Its length and width are in the ratio 3 : 2.
Find its area.

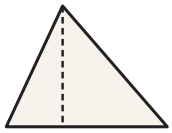


Area [ ] cm²

Answer _____

5

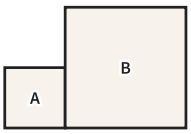
The base and the height of a triangle are in the ratio 4 : 3. Together they add up to 21 cm. Find the area of the triangle.



Answer _____

6

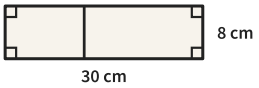
A line 12 cm long is split in the ratio 1 : 2.
A square is drawn on each part.
Find the ratio of the area of square A to the area of square B.



Answer _____

7

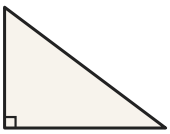
A rectangle is 30 cm long and 8 cm wide.
A line splits its length in the ratio 2 : 3.
Find the area of the larger part.



Answer _____

8

The two shorter sides of a right angled triangle are in the ratio 3 : 4.
Together they are 28 cm long.
Find the area of the triangle.



Answer _____

Ratio and area *further practice*

9

A rectangle has a perimeter of 72 cm.
Its length and width are in the ratio 7 : 2.
Find its area.

Answer _____

10

A garden is 20 m long and 15 m wide.
Its length is split into lawn and patio in the ratio 3 : 1. Find the area of the patio.

Answer _____

11

A wire 48 cm long is cut into two pieces in the ratio 1 : 2. Each piece is bent into a square. Find the total area of the two squares.

Answer _____

12

The base and height of a triangle are in the ratio 5 : 2. The base is 15 cm longer than the height. Find the area of the triangle.

Answer _____

13

The length and width of a rectangle are in the ratio 3 : 2. Its area is 150 cm².
Find its perimeter.

Answer _____

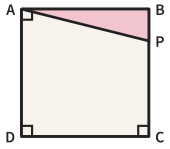
14

Rectangle A has sides in the ratio 2 : 1.
Rectangle B has sides in the ratio 3 : 2.
Both have a perimeter of 30 cm.
Which has the larger area, and by how much?

Answer _____

15

ABCD is a square of side 12 cm. P is on BC with BP : PC = 1 : 3. Find the ratio of the shaded area to the unshaded area.



Answer _____

16

A rectangle has a perimeter of 24 cm and its length and width are in the ratio 2 : 1.
Lily says the length is 16 cm because 24 ÷ 3 × 2 = 16. Explain her mistake and find the area.

Answer _____