

Year 4: Area: counting squares: answers

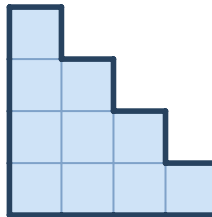
Year 4 - Perimeter, Area and Measures - Lesson 7.7

Answers. Final answers to the worksheet questions. Full step-by-step solutions for every question are free at websink.site/ks2-sats/maths/year-4/ch07-measures/area-counting-squares/

Exercise 7I Area Non-calculator

- 1 Each square has an area of 1 cm^2 . Count the squares to find the area of each shape.

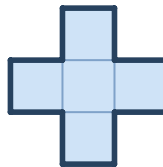
(a)



Area =

Answer: 10 cm^2

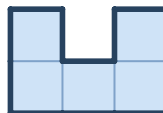
(b)



Area =

Answer: 5 cm^2

(c)



Area =

Answer: 5 cm^2

- 2 Use the rows and columns to find the area of each rectangle. Each square is 1 cm by 1 cm .

(a)



Area =

Answer: 12 cm^2

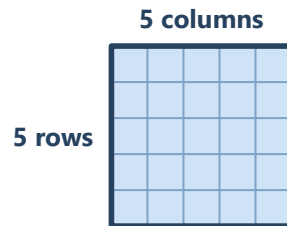
(b)



Area =

Answer: 14 cm^2

(c)



Area =

Answer: 25 cm^2

3 Work out the area of each rectangle.

(a) 8 cm long and 3 cm wide. Area =

Answer: 24 cm^2

(b) 9 cm long and 6 cm wide. Area =

Answer: 54 cm^2

(c) 12 cm long and 5 cm wide. Area =

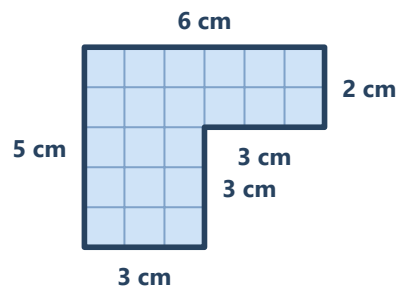
Answer: 60 cm^2

(d) 10 cm long and 10 cm wide. Area =

Answer: 100 cm^2

4 Split each L-shape into rectangles to find its area.

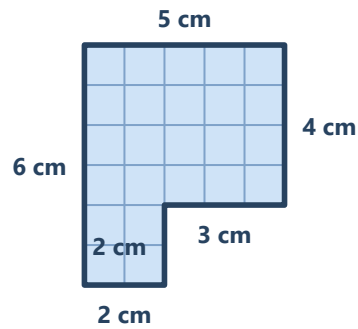
(a)



Area =

Answer: 21 cm^2

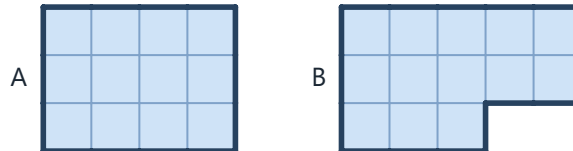
(b)



Area =

Answer: 24 cm²

5 Look at shapes A and B. Each square has an area of 1 cm².



(a) What is the area of shape A?

Answer: 12 cm²

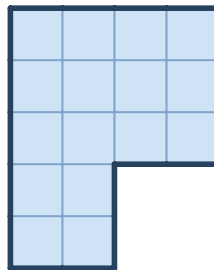
(b) What is the area of shape B?

Answer: 13 cm²

(c) Which shape has the bigger area? By how much?

Answer: Shape B, by 1 cm²

6 Each square has sides of 1 cm. Look at the shape.



(a) What is the area of the shape?

Answer: 16 cm²

(b) What is the perimeter of the shape?

Answer: 18 cm

7 Each rectangle has the area given and one side. Find the other side.

(a) Area 36 cm², one side 9 cm. The other side =

Answer: 4 cm

(b) Area 48 cm², one side 6 cm. The other side =

Answer: 8 cm

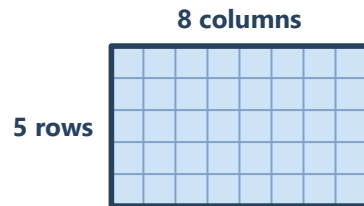
- (c) Area 30 cm^2 , one side 5 cm. The other side =

Answer: 6 cm

- 8 A rectangular room is 9 m long and 6 m wide. The floor is covered with square carpet tiles that are 1 m by 1 m. How many tiles are needed?

Answer: 54 tiles

- 9 A sheet of stamps has 5 rows. Each row has 8 stamps. How many stamps are on the sheet?

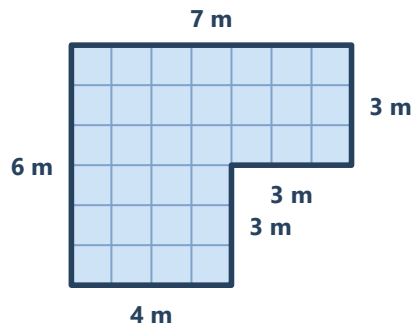


Answer: 40 stamps

- 10 Mei covers a card that is 12 cm long and 7 cm wide with square stickers. Each sticker is 1 cm by 1 cm. How many stickers does she need?

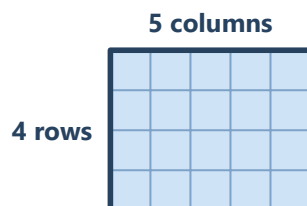
Answer: 84 stickers

- 11 A garden is shaped like an L. Dev wants to cover it with grass seed. What is the area of the garden? The measurements are in metres.



Answer: 33 m^2

- 12 Mei says, "A rectangle that is 4 cm long and 5 cm wide has an area of 18 cm^2 ." What mistake has Mei made? What is the correct area?



Answer: 20 cm^2

- 13 How many different rectangles with whole-number sides (in cm) have an area of 12 cm^2 ? Write the length and the width of each, and its perimeter.

Answer: 3 rectangles: 12 by 1, 6 by 2, 4 by 3

- 14** Always, sometimes or never true? “A shape with a bigger perimeter has a bigger area.” Use examples to explain.

Answer: Sometimes