Shapes – same area

1 Use the diagram to help you complete the sentences.
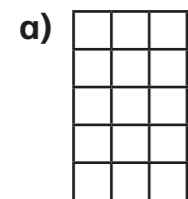
5 cm

4 cm
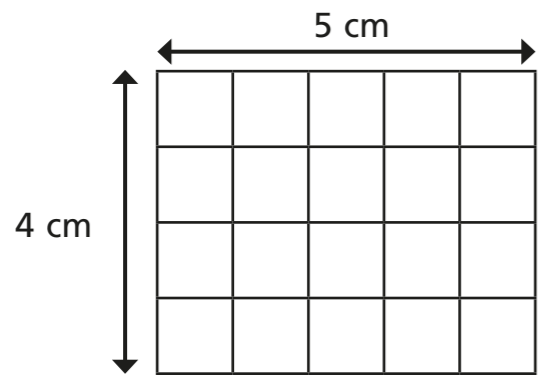
The length of the rectangle is $\boxed{5}$ cm.

The width of the rectangle is $\boxed{4}$ cm.

The total number of squares in the rectangle is $\boxed{20}$

The area of the rectangle is $\boxed{20}$ cm²

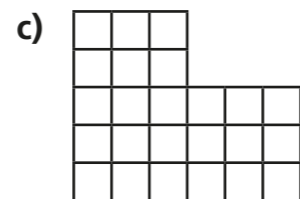**2** Work out the areas of the shapes. Each square represents 1 cm²
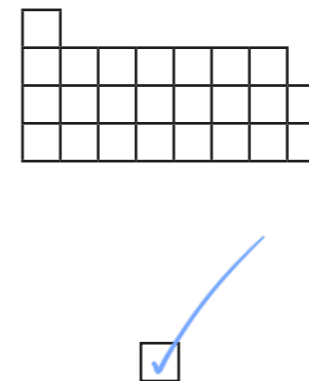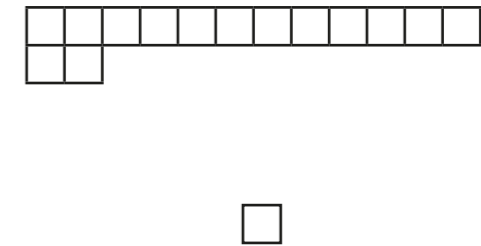
a)

b)

c)

$\boxed{15}$ cm²
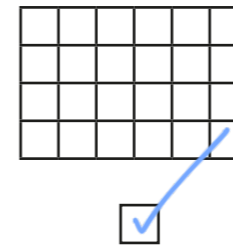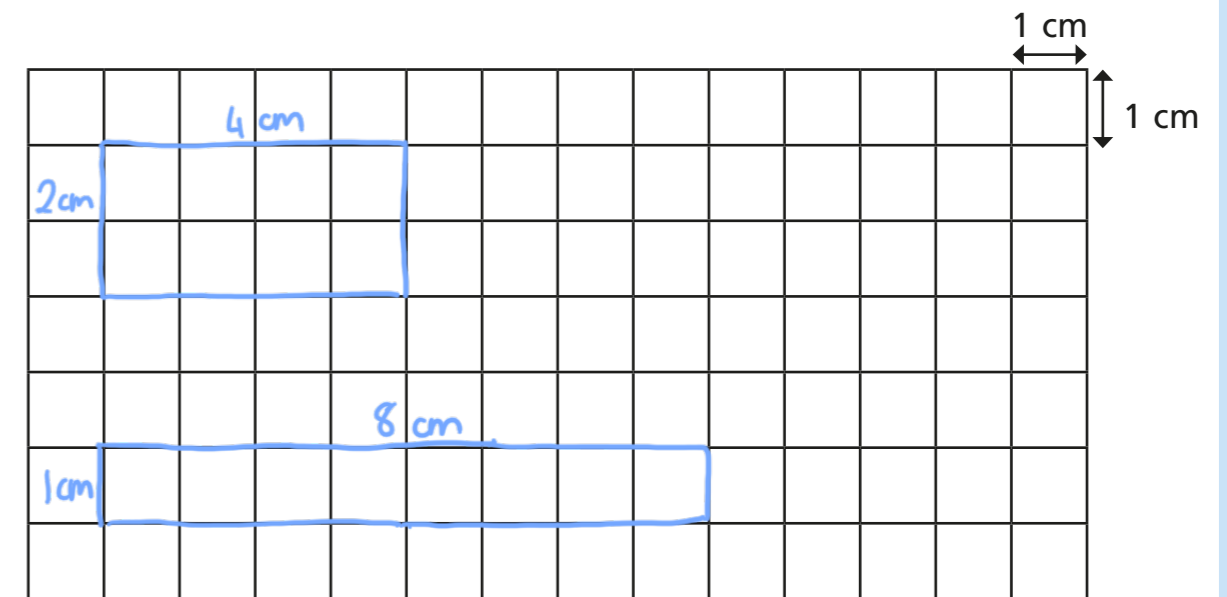
$\boxed{9}$ cm²
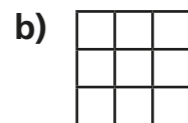
$\boxed{24}$ cm²

What do you notice?

3 Tick the shapes that have an area of 24 cm². Each square represents 1 cm²

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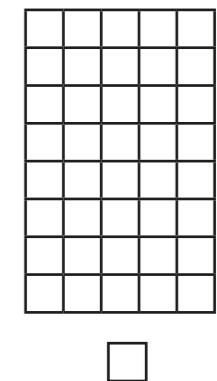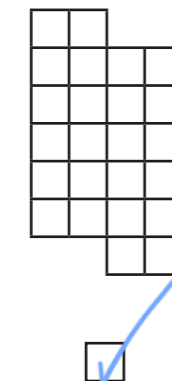
4 a) Draw two different rectangles that have an area of 8 cm²

Label the side lengths of your rectangles.

1 cm

1 cm

4 cm

2 cm

8 cm

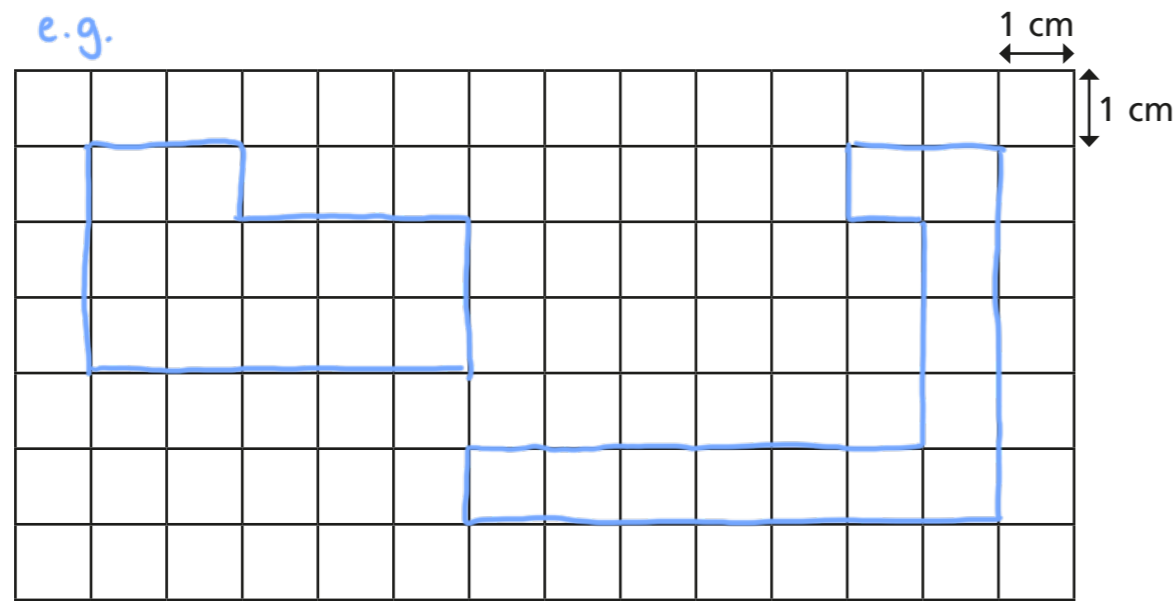1 cm

b) Write the factors of 8 ___1, 2, 4, 8___

What do you notice? Talk about it with a partner.

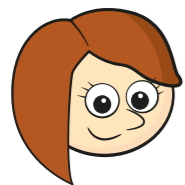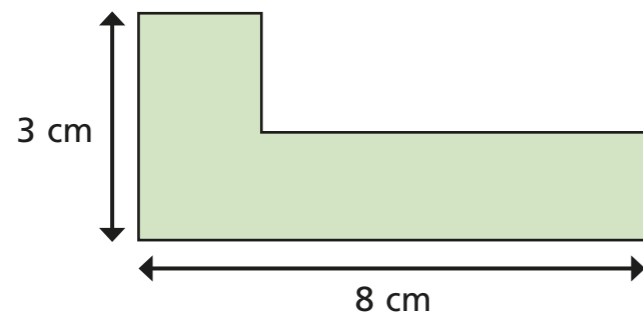**5** Draw two different rectilinear shapes that have an area of 12 cm²

e.g.

1 cm

1 cm

Compare shapes with a partner.

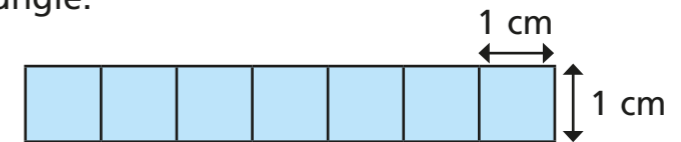**6** Rosie is finding the area of this shape.

3 cm

8 cm

To find the area of the shape, you can multiply 3 by 8, so the area must be 24 cm²

Do you agree with Rosie? _____No_____

Explain your answer.

It is not a rectangle.
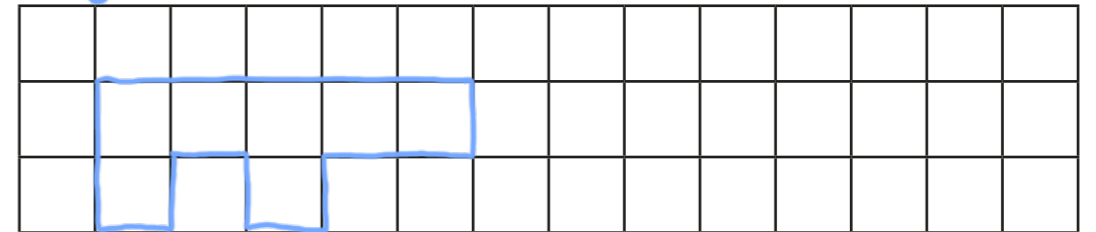
7 Here is a rectangle.

1 cm

1 cm

a) Work out the area of the rectangle. area = $\boxed{7}$ cm²

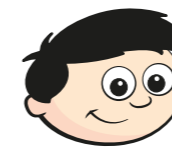b) Draw a different rectilinear shape that has the same area.
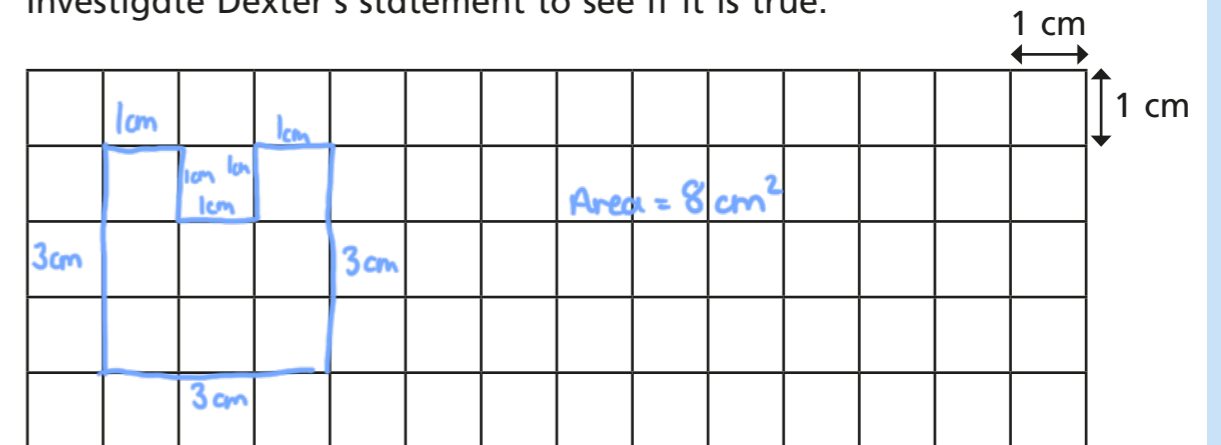
e.g.

Compare answers with a partner.

8

It is impossible to have a rectilinear shape with an even area if all its sides are odd numbers.

Investigate Dexter's statement to see if it is true.

1 cm

1 cm

1cm   1cm

1cm 1cm
1cm

Area = 8 cm²

3cm

3cm

3cm

Compare your findings with a partner.