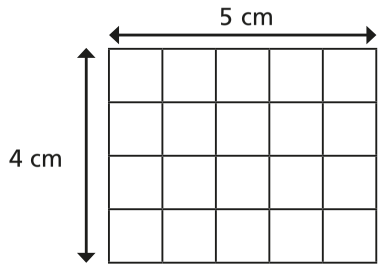
Shapes – same area

1 Use the diagram to help you complete the sentences.



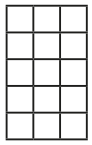
The length of the rectangle is [5] cm.

The width of the rectangle is [4] cm.

The total number of squares in the rectangle is [20]

The area of the rectangle is [20] cm^2

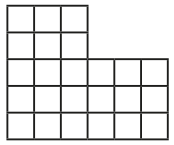
2 Work out the areas of the shapes. Each square represents 1 cm^2

a) 

[15] cm^2

b) 

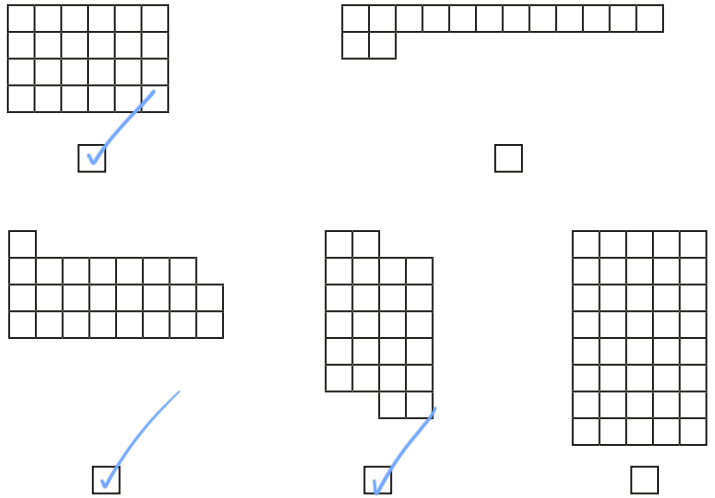
[9] cm^2

c) 

[24] cm^2

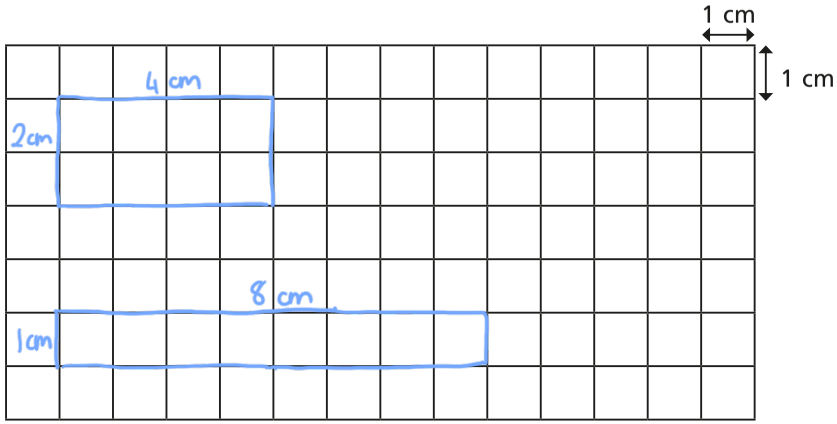
What do you notice?

3 Tick the shapes that have an area of 24 cm^2. Each square represents 1 cm^2



4 **a)** Draw two different rectangles that have an area of 8 cm^2

Label the side lengths of your rectangles.



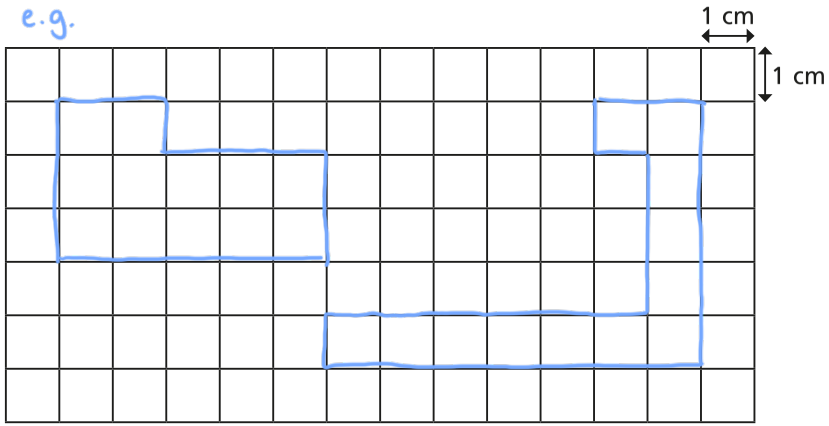
b) Write the factors of 8 [1, 2, 4, 8]

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

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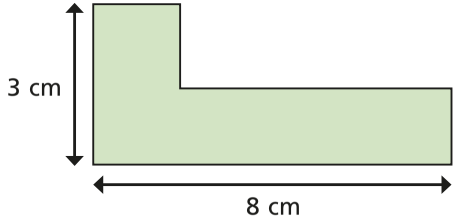
5 Draw two different rectilinear shapes that have an area of 12 cm²

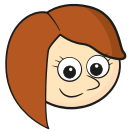
e.g.



Compare shapes with a partner.

6 Rosie is finding the area of this shape.





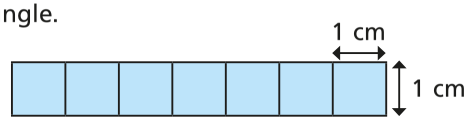
To find the area of the shape, you can multiply 3 by 8, so the area must be 24 cm²

Do you agree with Rosie? No

Explain your answer.

It is not a rectangle.

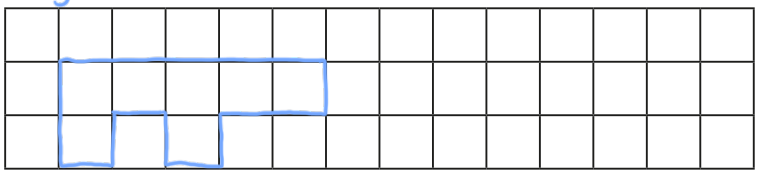
7 Here is a rectangle.



a) Work out the area of the rectangle. area = 7 cm²

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

e.g.



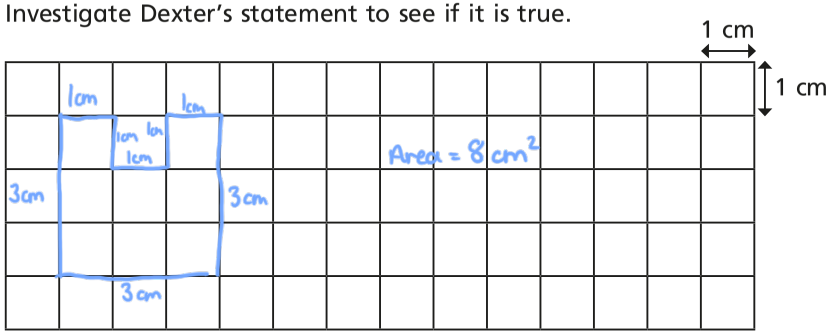
Compare answers with a partner.

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.



Compare your findings with a partner.

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