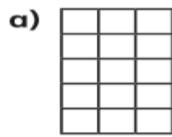


This week we are revising perimeter, area and volume

**LO: To identify when shapes have the same area (Bronze).**

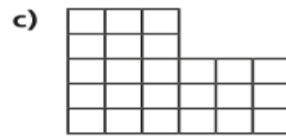
1) Work out the areas of the shapes. Each square represents 1 cm<sup>2</sup>



cm<sup>2</sup>



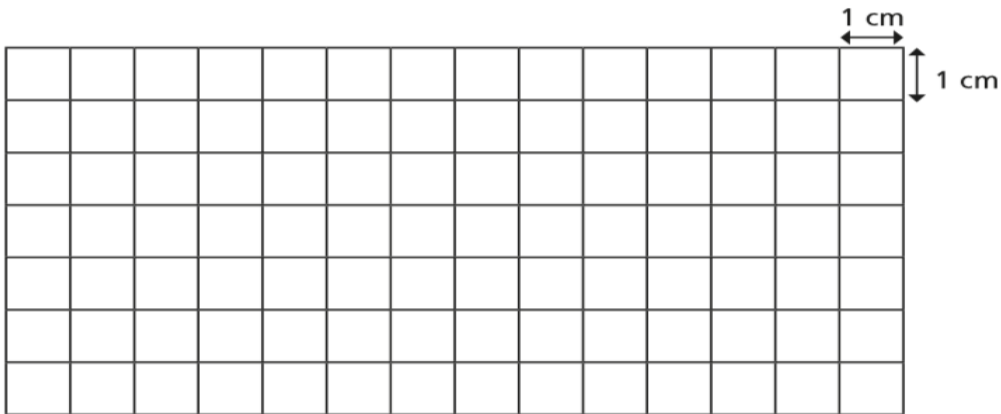
cm<sup>2</sup>



cm<sup>2</sup>

What do you notice?

2) a) Draw two different rectangles that have an area of 8 cm<sup>2</sup>  
Label the side lengths of your rectangles.



b) Write the factors of 8 \_\_\_\_\_

<p>3) Warren says,</p> <div style="text-align: center;"> <p style="border: 1px solid black; border-radius: 15px; padding: 5px; display: inline-block;">I can draw a four-sided and a six-sided rectilinear shape with an area of 12cm<sup>2</sup>.</p> </div> <p>Draw two shapes to prove that Warren is correct.</p>	<p>4) Cailyn says,</p> <div style="text-align: center;"> <p style="border: 1px solid black; border-radius: 15px; padding: 5px; display: inline-block;">I can draw a four-sided and a six-sided rectilinear shape with an area of 16cm<sup>2</sup>.</p> </div> <p>Draw two shapes to prove that Cailyn is correct.</p>
<p>5) True or false? All of these shapes have the same area.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>A</p> </div> <div style="text-align: center;"> <p>B</p> </div> <div style="text-align: center;"> <p>C</p> </div> </div> <p>Explain your answer.</p>	<p>6) True or false? All of these shapes have the same area.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>A</p> </div> <div style="text-align: center;"> <p>B</p> </div> <div style="text-align: center;"> <p>C</p> </div> </div> <p>Explain your answer.</p>



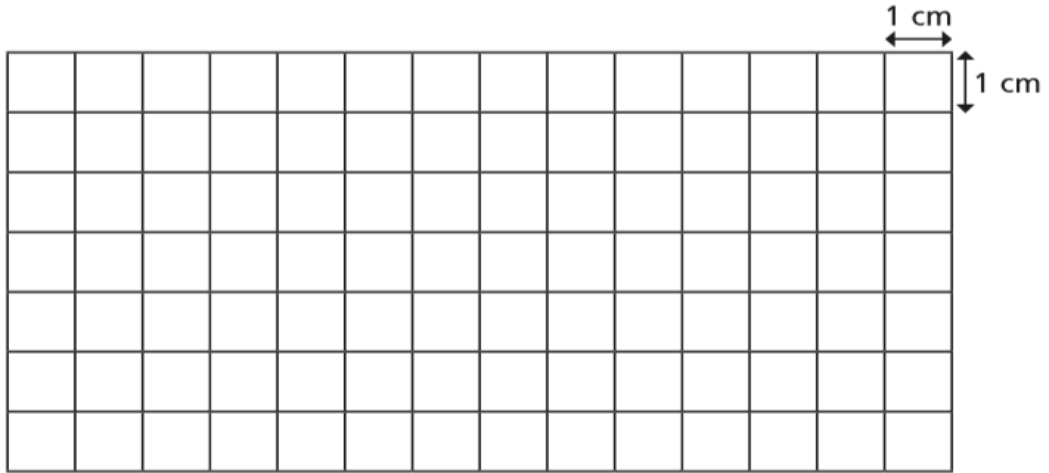
not to scale



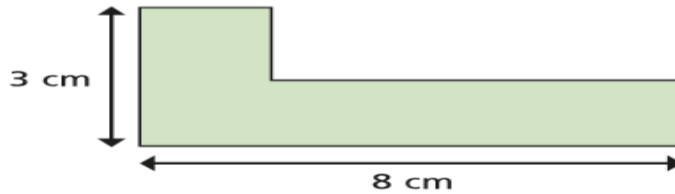
not to scale

**LO: To identify when shapes have the same area (Silver).**

- 1) Draw two different rectilinear shapes that have an area of  $12\text{ cm}^2$



- 2) 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  $24\text{ cm}^2$

Do you agree with Rosie? \_\_\_\_\_

Explain your answer.

- 3) Suzi says,



I can draw a six-sided and an eight-sided rectilinear shape with an area of  $18\text{ cm}^2$ .

Draw two shapes to prove that Suzi is correct. Your shapes must include some half squares.

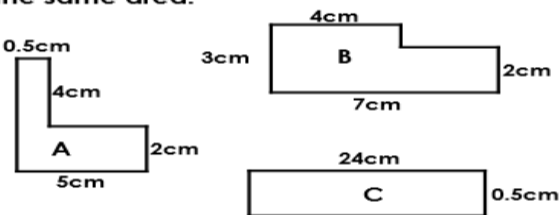
- 4) Jasper says,



I can draw a six-sided and an eight-sided rectilinear shape with an area of  $22\text{ cm}^2$ .

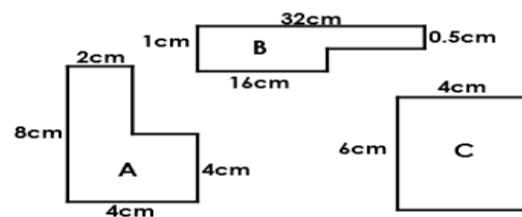
Draw two shapes to prove that Jasper is correct. Your shapes must include some half squares.

- 5) True or false? All of these shapes have the same area.



Explain your answer.

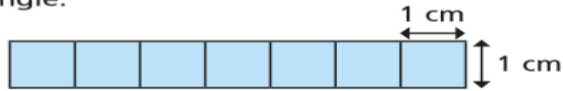
- 6) True or false? All of these shapes have the same area.



Explain your answer.

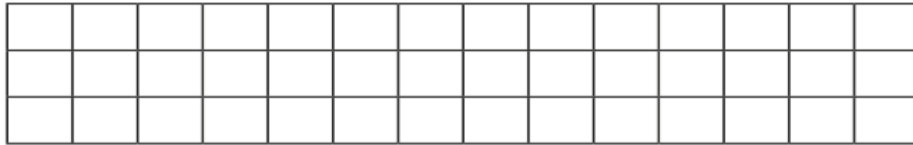
**LO: To identify when shapes have the same area (Gold).**

1) Here is a rectangle.



a) Work out the area of the rectangle. area =  cm<sup>2</sup>

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

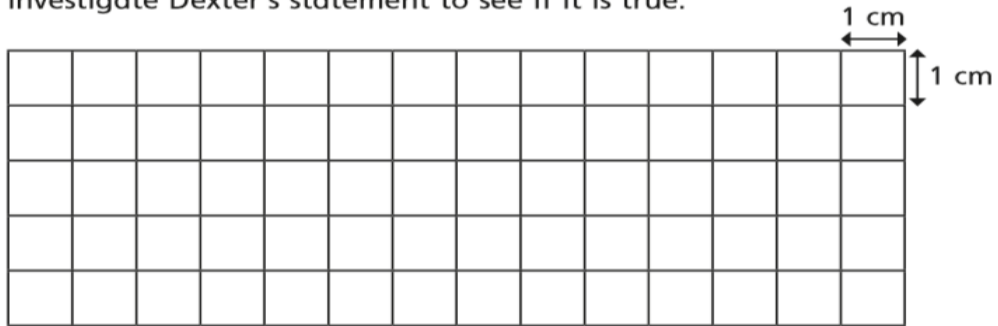


2)

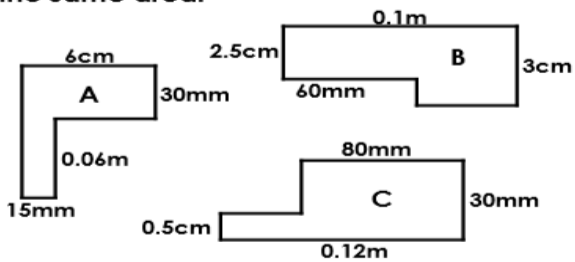


It is impossible to have a rectilinear shape with an even area if all its sides are odd numbers.

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

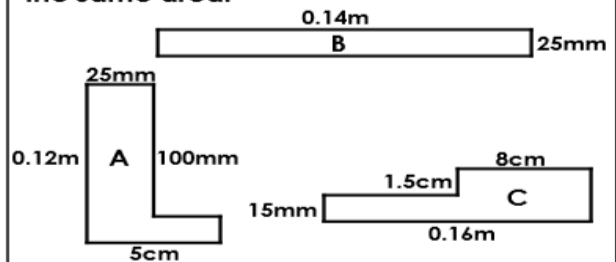


3) True or false? All of these shapes have the same area.



Explain your answer.

4) True or false? All of these shapes have the same area.



Explain your answer.

5) Nate is experimenting with the area of rectilinear shapes.

He says,

"If a shape has an area of 36cm<sup>2</sup>, the length of it could be 65mm."

Is he correct? Explain why.

6) Isabelle is experimenting with the area of rectilinear shapes.

She says,

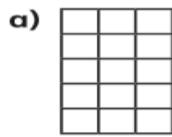
"If a shape has a length of 25cm, the area could be 7cm<sup>2</sup>."

Is she correct? Explain why.

This week we are revising perimeter, area and volume

**LO: To identify when shapes have the same area (Bronze) - answers**

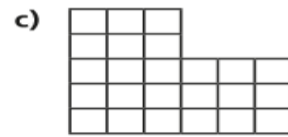
1) Work out the areas of the shapes. Each square represents 1 cm<sup>2</sup>



**15** cm<sup>2</sup>



**9** cm<sup>2</sup>

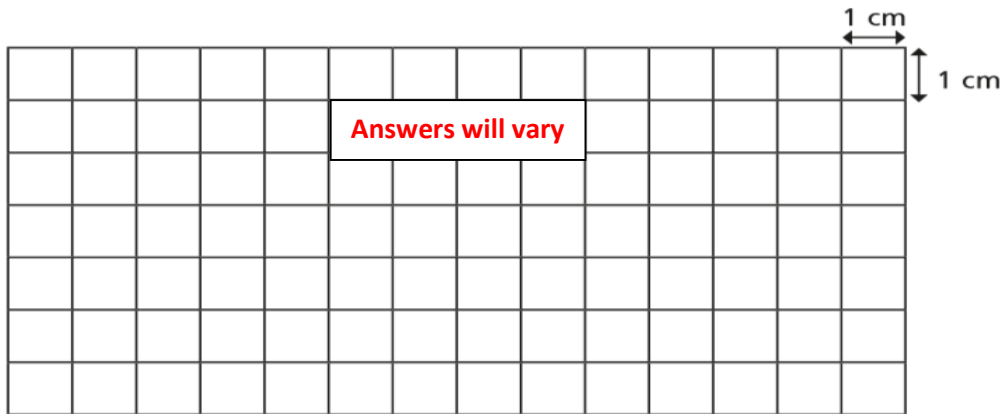


**24** cm<sup>2</sup>


What do you notice?

**c = a + b**

2) a) Draw two different rectangles that have an area of 8 cm<sup>2</sup>  
Label the side lengths of your rectangles.




b) Write the factors of 8 **1, 8, 2, 4**

3) Warren says,  
  
I can draw a four-sided and a six-sided rectilinear shape with an area of 12cm<sup>2</sup>.

Draw two shapes to prove that Warren is correct.

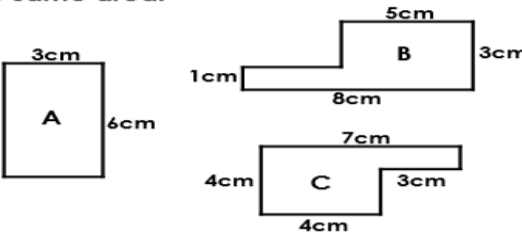
**Answers will vary**

4) Cailyn says,  
  
I can draw a four-sided and a six-sided rectilinear shape with an area of 16cm<sup>2</sup>.

Draw two shapes to prove that Cailyn is correct.

**Answers will vary**

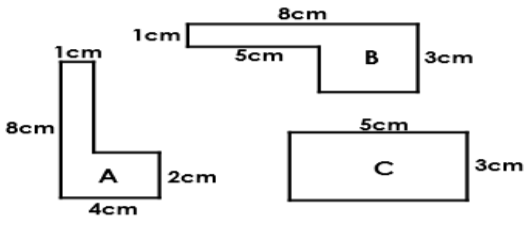
5) True or false? All of these shapes have the same area.



Explain your answer.

**False, because...**

6) True or false? All of these shapes have the same area.

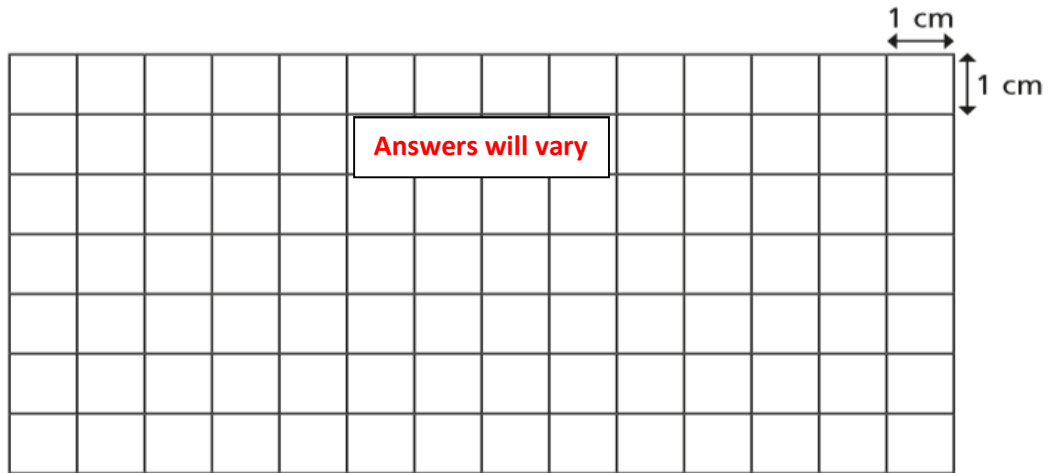


Explain your answer.

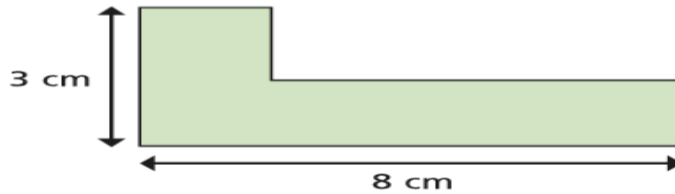
**False, because...**

**LO: To identify when shapes have the same area (Silver)-answers**

3) Draw two different rectilinear shapes that have an area of  $12\text{ cm}^2$



4) 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  $24\text{ cm}^2$

Do you agree with Rosie?  No, because...

Explain your answer.

3) Suzi says,

I can draw a six-sided and an eight-sided rectilinear shape with an area of  $18\text{ cm}^2$ .

Draw two shapes to prove that Suzi is correct. Your shapes must include some half squares.

**Answers will vary**

4) Jasper says,

I can draw a six-sided and an eight-sided rectilinear shape with an area of  $22\text{ cm}^2$ .

Draw two shapes to prove that Jasper is correct. Your shapes must include some half squares.

**Answers will vary**

5) True or false? All of these shapes have the same area.

Explain your answer. **False, because...**

6) True or false? All of these shapes have the same area.

Explain your answer. **True**

This week we are revising perimeter, area and volume

**LO: To identify when shapes have the same area (Gold)-answers**

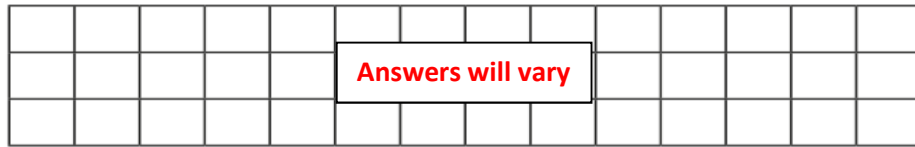
3) Here is a rectangle.



a) Work out the area of the rectangle.

area = 7 cm<sup>2</sup>

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

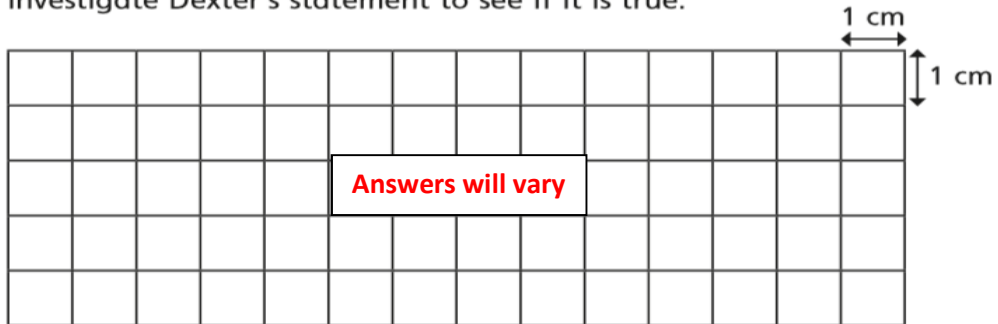


4)

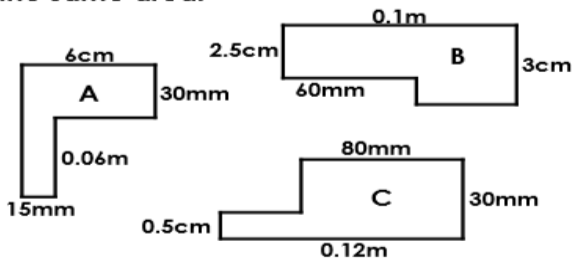


It is impossible to have a rectilinear shape with an even area if all its sides are odd numbers.

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



3) True or false? All of these shapes have the same area.

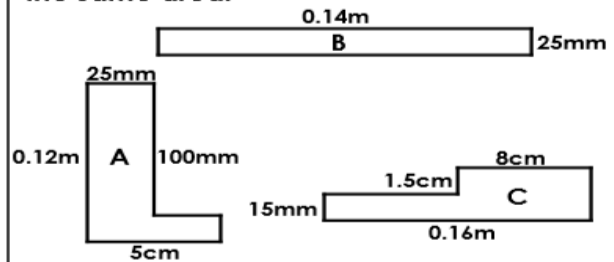


Explain your answer.

**False, because...**

*not to scale*

4) True or false? All of these shapes have the same area.



Explain your answer.

**False, because...**

*not to scale*

5) Nate is experimenting with the area of rectilinear shapes.

He says,

"If a shape has an area of 36cm<sup>2</sup>, the length of it could be 65mm."

**Yes, because...**

Is he correct? Explain why.

6) Isabelle is experimenting with the area of rectilinear shapes.

She says,

"If a shape has a length of 25cm, the area could be 7cm<sup>2</sup>."

**Yes, because...**

Is she correct? Explain why.