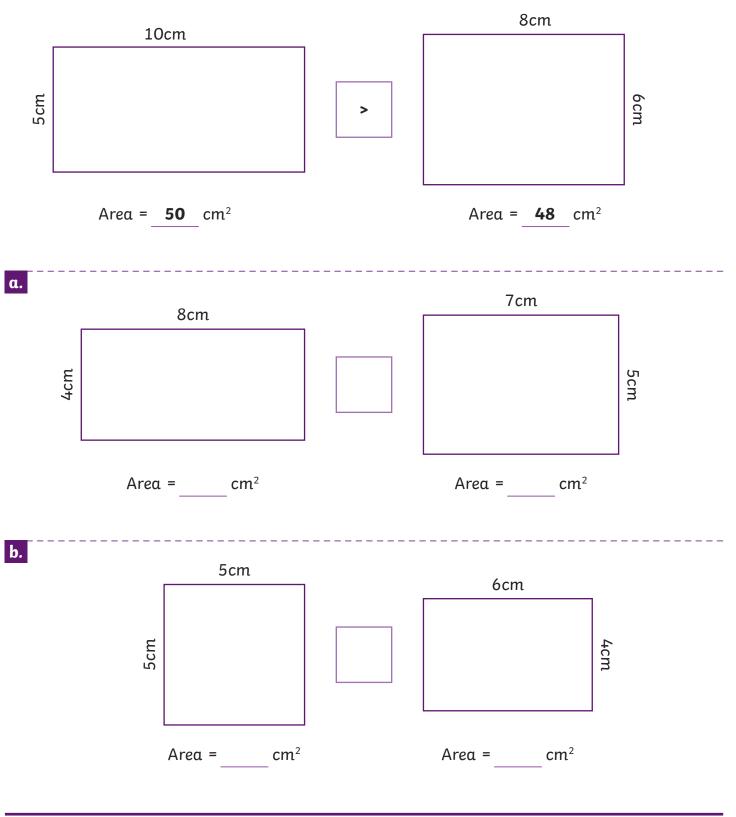
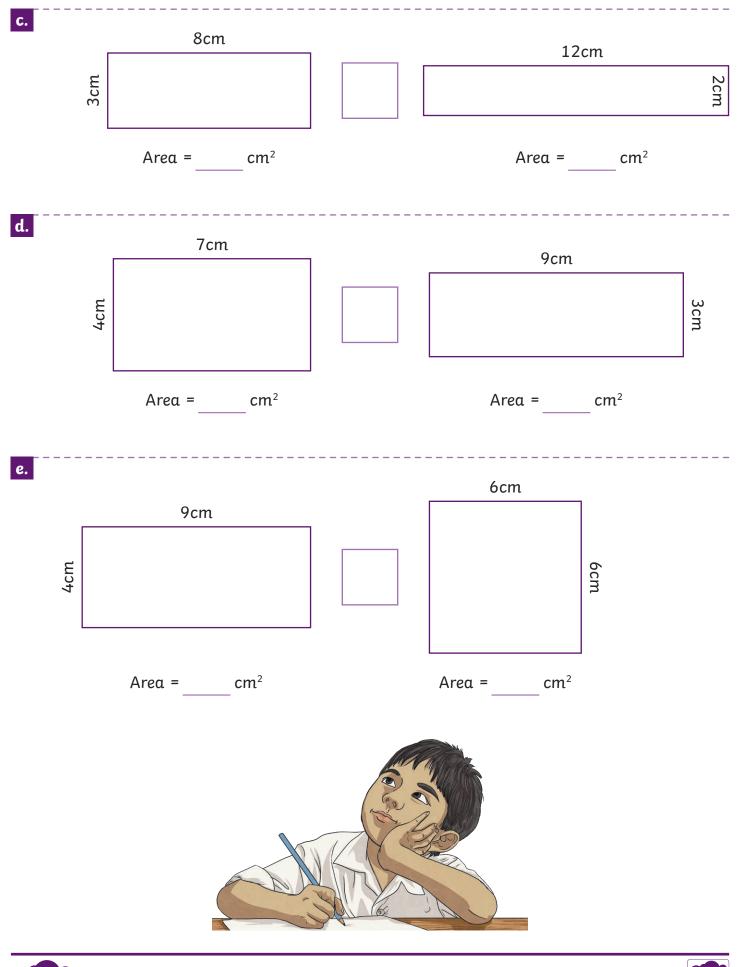
### **Compare Area of Rectangles**

1. Calculate the area of each rectangle and compare them using <, > or =. The first has been done for you.

Rectangles not drawn to scale.

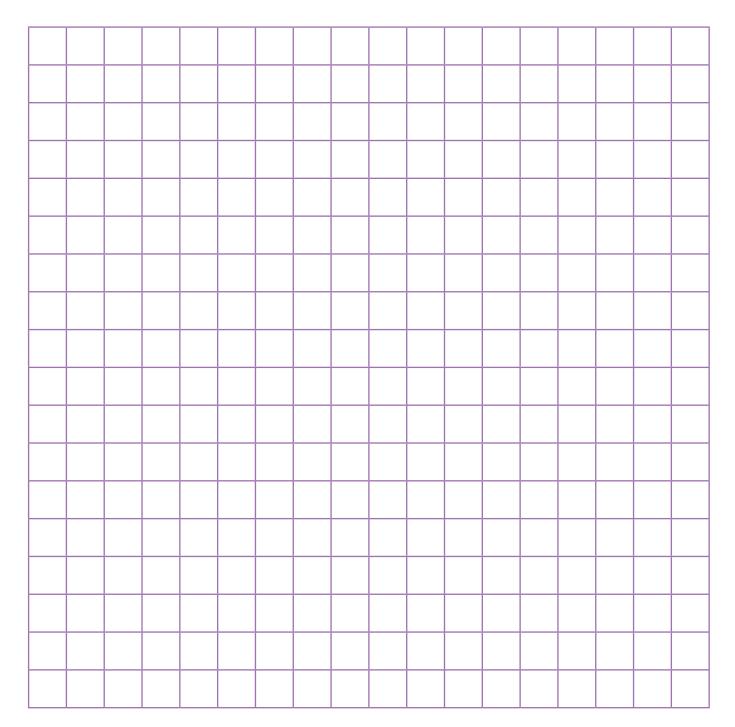


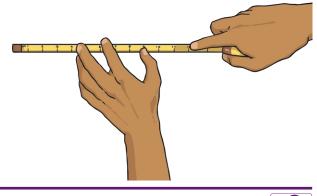






2. Draw two rectangles with different areas and compare them using < or >.







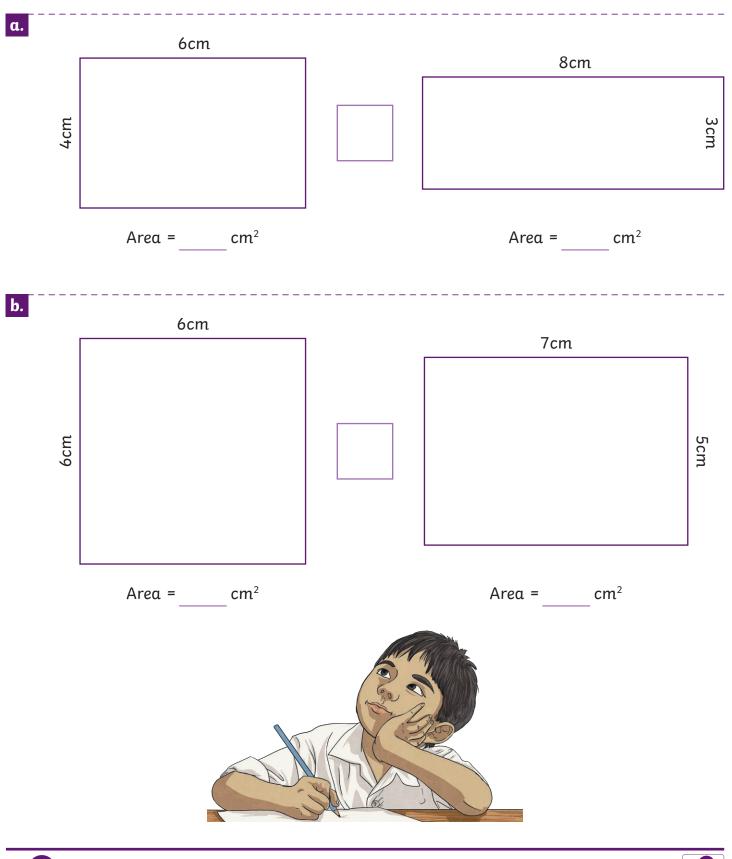
### Compare Area of Rectangles **Answers**

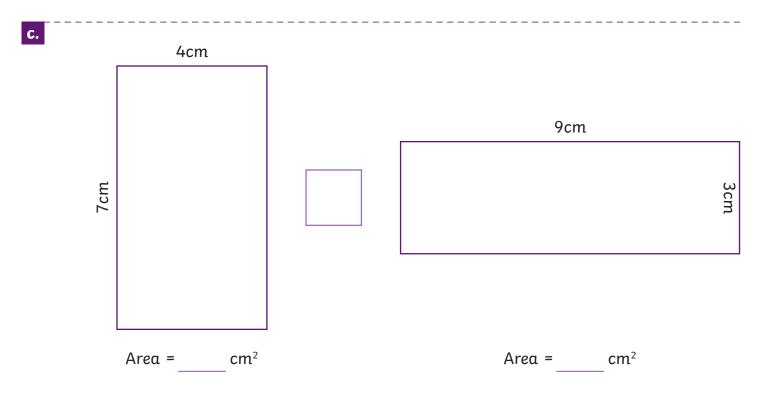
<b>1.</b> Calculate the area of each rectangle and compare them using $<$ , $>$ or $=$ .								
Number	Length	Width	Area =		Length	Width	Area =	
α.	8cm	4cm	32cm <sup>2</sup>	<	7cm	5cm	35cm <sup>2</sup>	
b.	5cm	5cm	25cm <sup>2</sup>	>	6cm	4cm	24cm <sup>2</sup>	
с.	3cm	8cm	24cm <sup>2</sup>	=	12cm	2cm	24cm <sup>2</sup>	
d.	7cm	4cm	28cm <sup>2</sup>	>	9cm	3cm	27cm <sup>2</sup>	
e.	9cm	4cm	36cm <sup>2</sup>	=	6cm	6cm	36cm <sup>2</sup>	
2. Draw two rectangles with different areas and compare them using < or >.								
Accept any two rectangles compared correctly.								



### **Compare Area of Rectangles**

 Here are some rectangles drawn to scale. Measure and calculate the area of each rectangle. Compare each pair of rectangles using <, > or =.



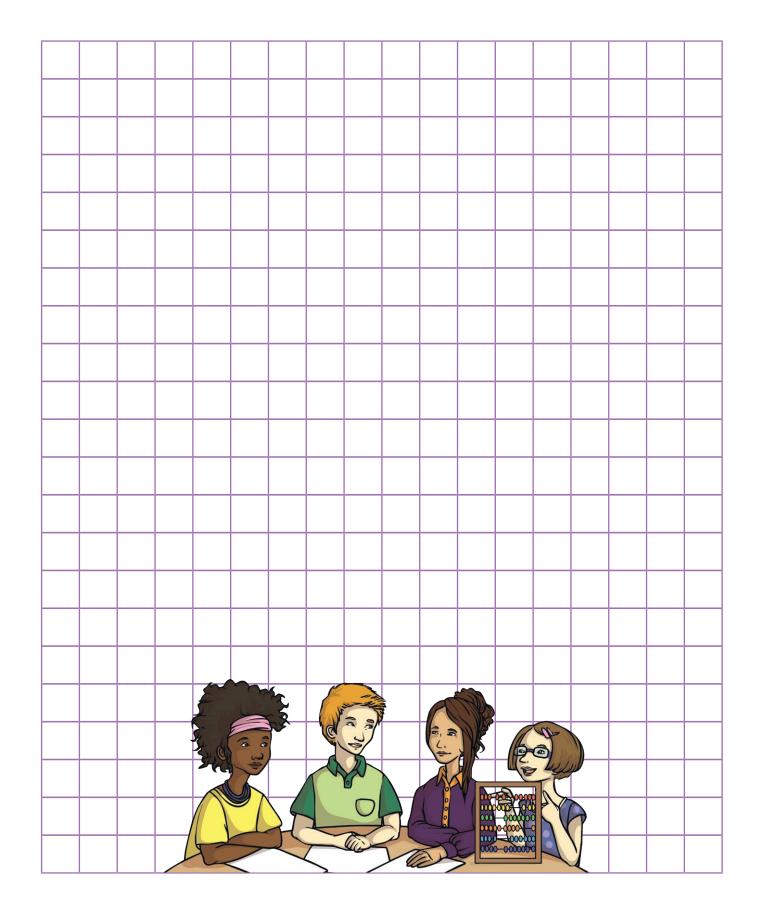


2. Look at the dimensions of these rectangles. Can you complete the table by comparing each pair of rectangles?

Rectangle A	Rectangle B
9m × 6m	8m × 7m
Area = m²	Area =m²
9m × 9m	10m × 8m
Area = m²	Area =m²
12m × 6m	8m × 9m
Area = m²	Area = m²

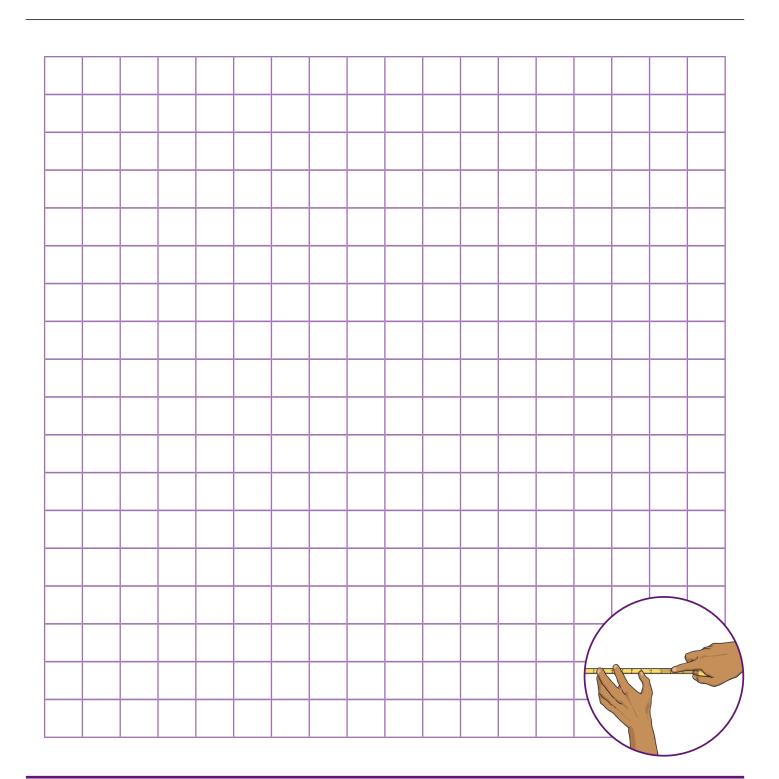


3. Draw two rectangles with a difference of  $1 \text{cm}^2$  and compare them using < or >.





4. **Rectangles must always have the same length and width in order to have the same area.** Is this statement true or false? Explain your answer fully.





# Compare Area of Rectangles **Answers**

<ol> <li>Here are some rectangles drawn to scale. Measure and calculate the area of each rectangle.</li> <li>Compare each pair of rectangles using &lt;, &gt; or =.</li> </ol>									
Number	Length	Width	Area =				Length	Width	Area =
α.	6cm	4cm	24cm <sup>2</sup>		=	=	8cm	3cm	24cm <sup>2</sup>
b.	6cm	6cm	36cm²		:	>	7cm	5cm	35cm²
с.	4cm	7cm	28cm <sup>2</sup>		>		9cm	3cm	27cm <sup>2</sup>
<b>2.</b> Look at the dimensions of these rectangles. Can you complete the table by comparing each pair of rectangles?									
Rectangle A						Rectangle B			
9m × 6m Area = <b>54m</b> ²					<pre></pre>				
9m × 9m Area = <b>81m</b> ²				:	10m × 8m Area = <b>80m</b> ²				
12m × 6m Area = <b>72m</b> ²				-	-	8m × 9m Area = <b>72m</b> ²			

**3.** Draw two rectangles with a difference of  $1cm^2$  and compare them using < or >.

Accept any two rectangles with a difference of 1cm<sup>2</sup>.

4. Rectangles must always have the same length and width in order to have the same area. Is this statement true or false? Explain your answer fully.

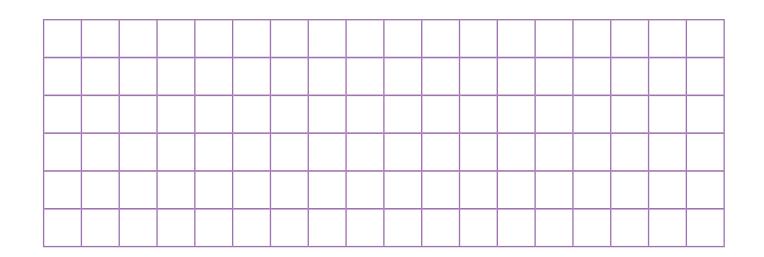
Accept any explanation that shows that the statement is false. For example, a rectangle could be 5cm in length, 4cm in width and have an area of 20cm<sup>2</sup> while another could have a length of 20cm, a width of 1cm and also have an area of 20cm<sup>2</sup>.



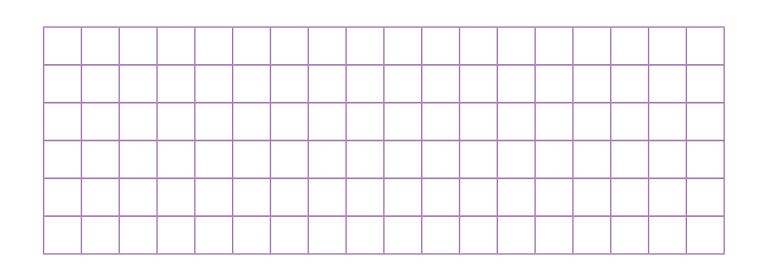


# **Compare Area of Rectangles**

1. **Rectangles must always have the same length and width in order to have the same area.** Is this statement true or false? Explain your answer fully.



 If the length and width are whole numbers, you cannot have a square with an area of 12cm<sup>2</sup>. Is this statement true or false? Explain your answer fully.

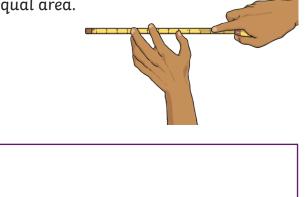




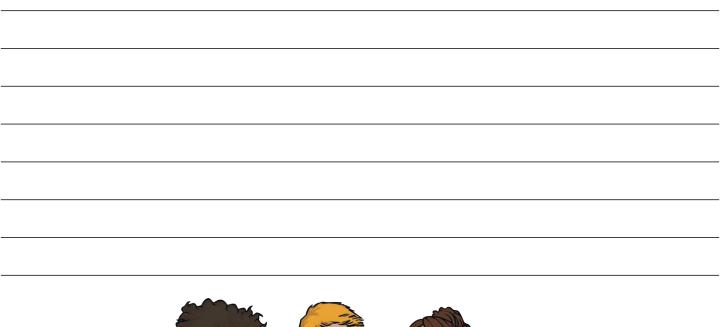
3. These rectangles have different dimensions but an equal area.

Rectangles not drawn to scale.





One rectangle can be cut **once** and rearranged to make the other rectangle. What could the dimensions of each rectangle be? Where would one be cut?









### Compare Area of Rectangles **Answers**

**1.** Rectangles must always have the same length and width in order to have the same area. Is this statement true or false? Explain your answer fully.

Accept any explanation that shows that the statement is false. For example, a rectangle could be 5cm in length, 4cm in width and have an area of  $20cm^2$  while another could have a length of 20cm, a width of 1cm and also have an area of  $20cm^2$ .

 If the length and width are whole numbers, you cannot have a square with an area of 12cm<sup>2</sup>. Is this statement true or false? Explain your answer fully.

Accept any explanation that shows that the statement is true. For example, a square must have an equal length and width. As 12 is not a square number, no whole number can multiply by itself to make 12.

**3.** These rectangles have different dimensions but an equal area. One rectangle can be cut once and rearranged to make the other rectangle.

What could the dimensions of each rectangle be? Where would one be cut?

Accept correct answers based on a square and rectangle. For example, if the square has dimensions of 6cm  $\times$  6cm, it could be cut in half once and rearranged to make a rectangle with dimensions of 12cm  $\times$  3cm. Both of these rectangles will have an area of 36cm<sup>2</sup>.

