

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.

10cm
5cm

Area = 50 cm²

>

8cm
6cm

Area = 48 cm²

a.

8cm
4cm

Area = _____ cm²

7cm
5cm

Area = _____ cm²

b.

5cm
5cm

Area = _____ cm²

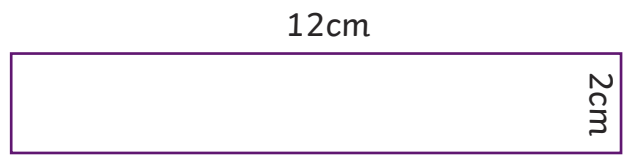
6cm
4cm

Area = _____ cm²

c.

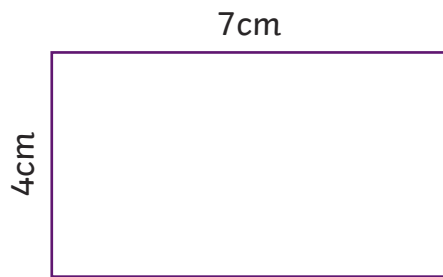


Area = _____ cm^2



Area = _____ cm^2

d.

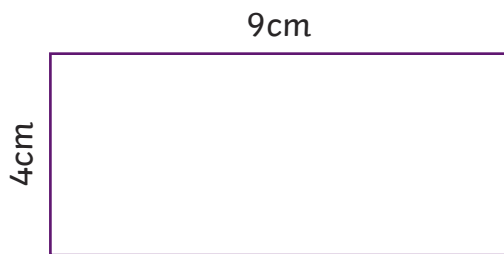


Area = _____ cm^2

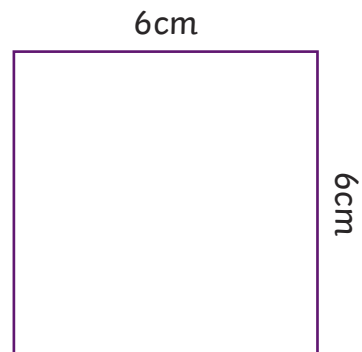


Area = _____ cm^2

e.



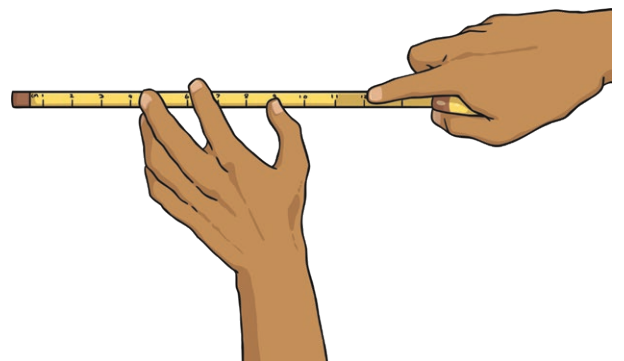
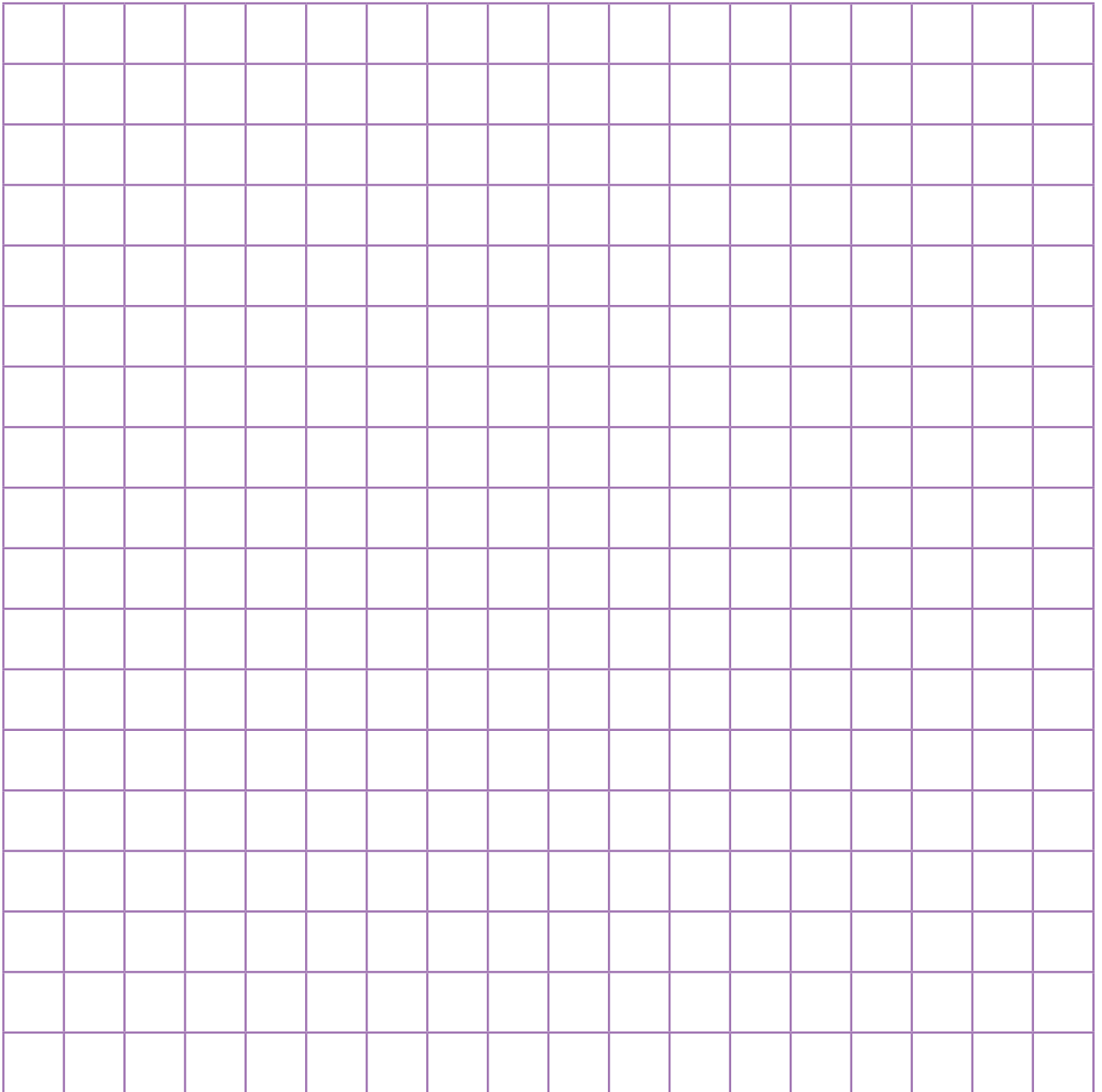
Area = _____ cm^2



Area = _____ cm^2



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



Compare Area of Rectangles **Answers**

1. Calculate the area of each rectangle and compare them using $<$, $>$ or $=$.

Number	Length	Width	Area =		Length	Width	Area =
a.	8cm	4cm	32cm²	$<$	7cm	5cm	35cm²
b.	5cm	5cm	25cm²	$>$	6cm	4cm	24cm²
c.	3cm	8cm	24cm²	$=$	12cm	2cm	24cm²
d.	7cm	4cm	28cm²	$>$	9cm	3cm	27cm²
e.	9cm	4cm	36cm²	$=$	6cm	6cm	36cm²

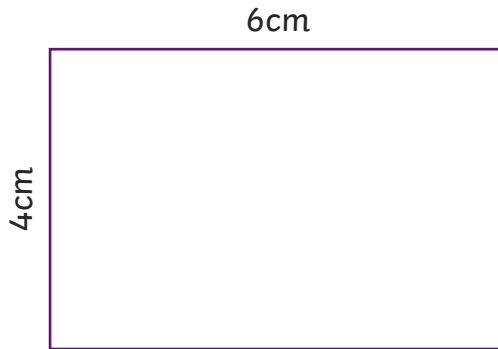
2. Draw two rectangles with different areas and compare them using $<$ or $>$.

Accept any two rectangles compared correctly.

Compare Area of Rectangles

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

a.

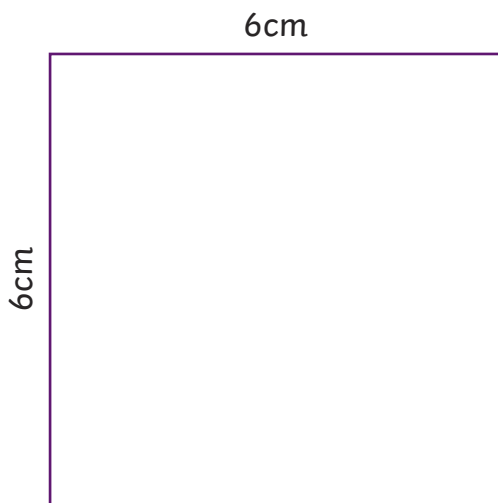


Area = _____ cm^2

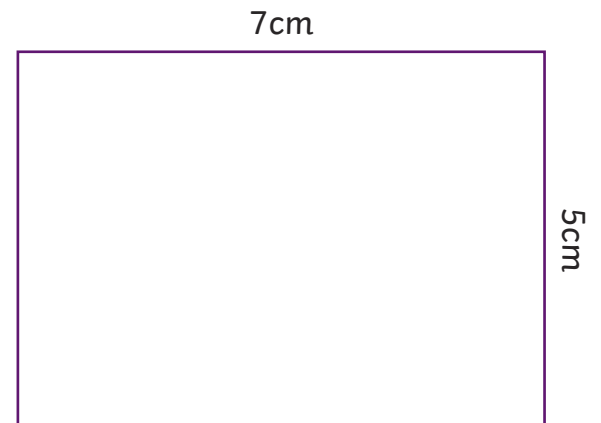


Area = _____ cm^2

b.



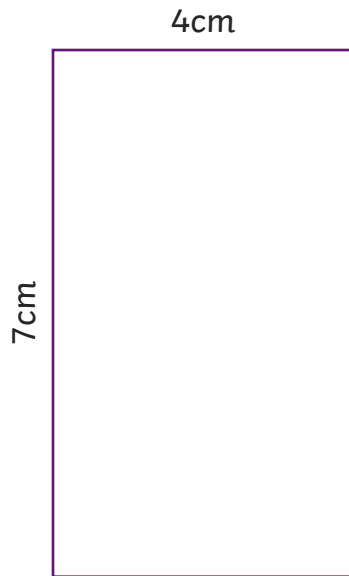
Area = _____ cm^2



Area = _____ cm^2



C.



Area = _____ cm²

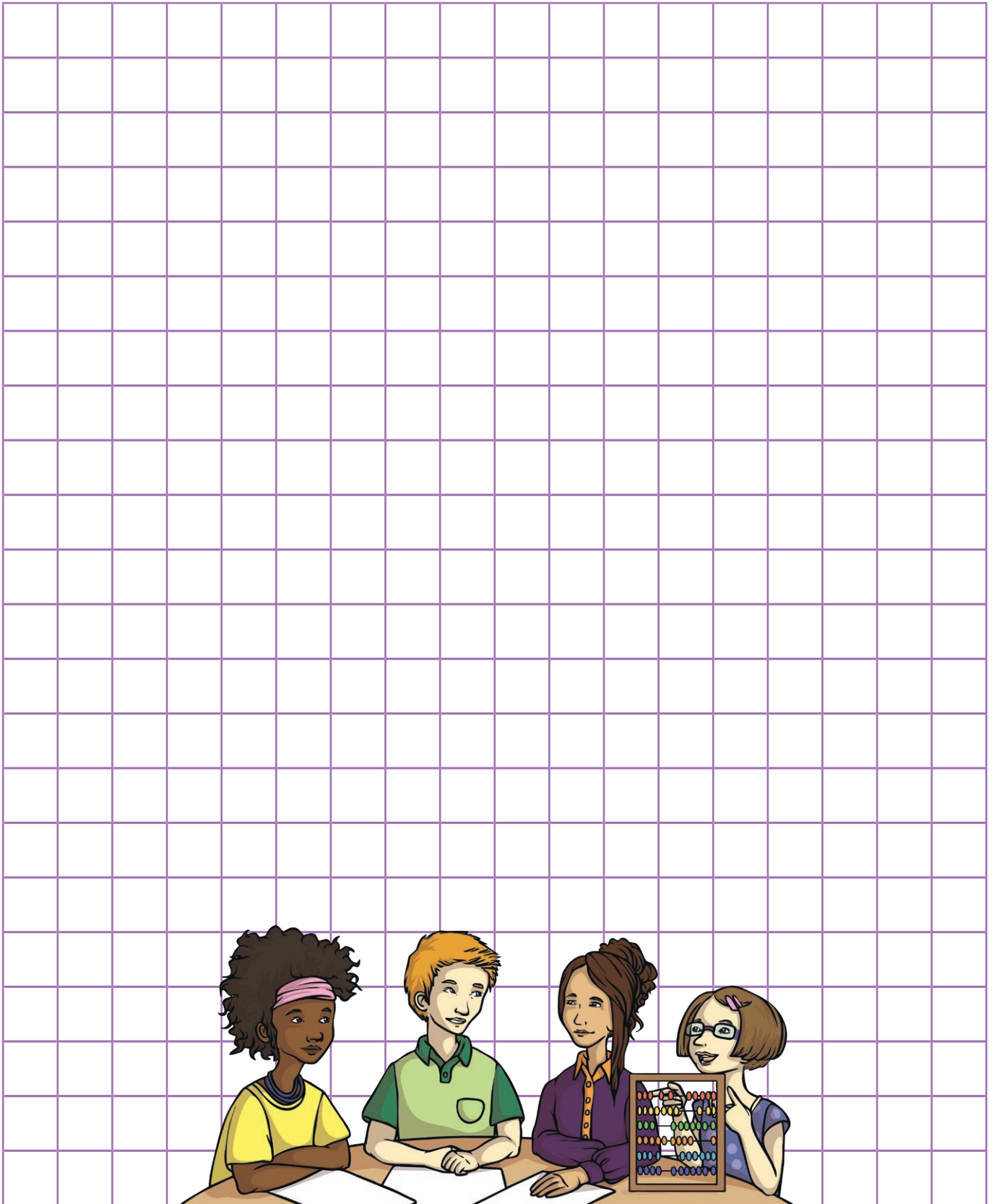


Area = _____ cm²

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

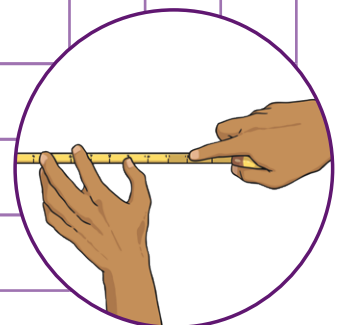
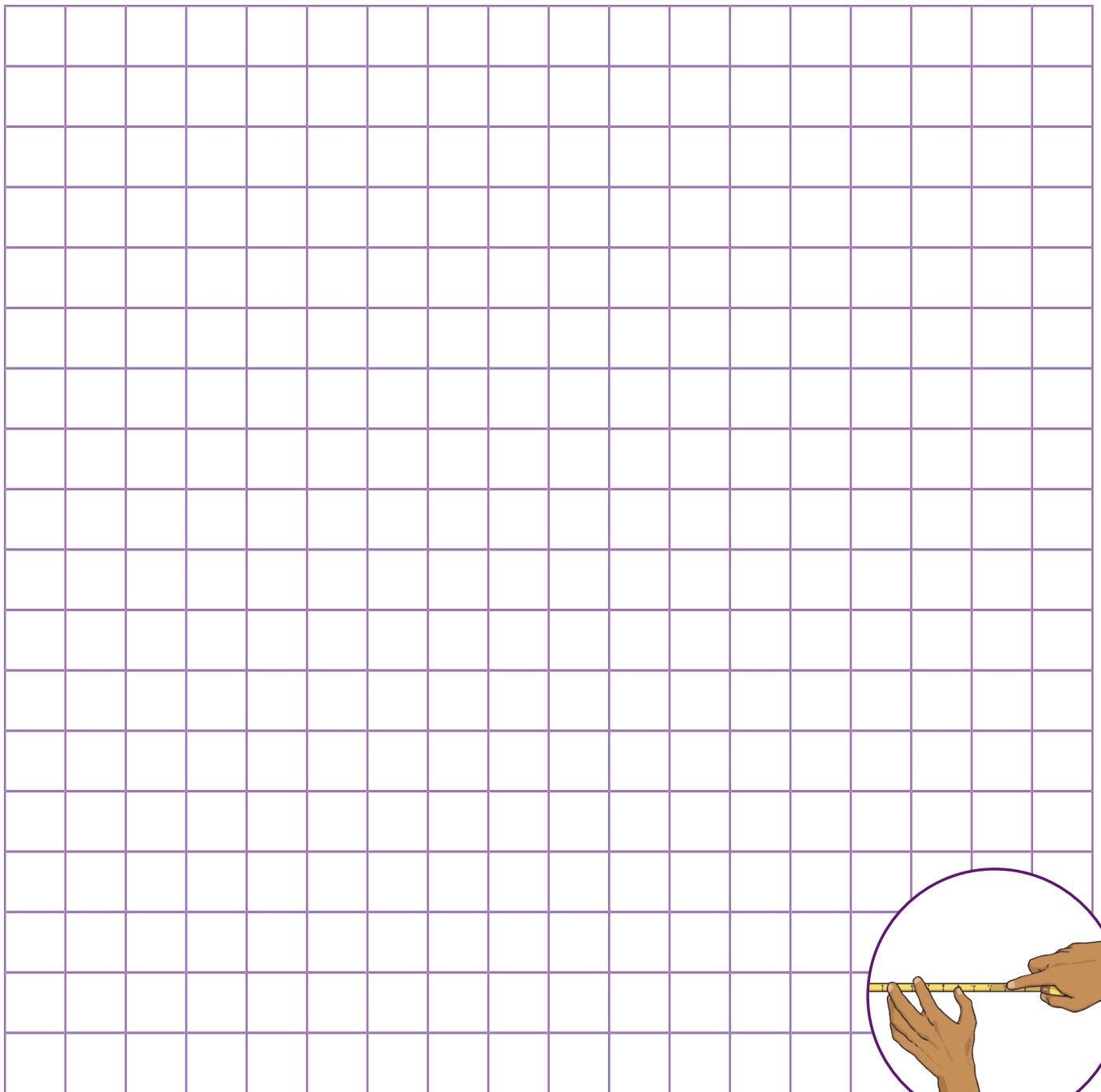
Rectangle A		Rectangle B
9m × 6m Area = _____ m ²		8m × 7m Area = _____ m ²
9m × 9m Area = _____ m ²		10m × 8m Area = _____ m ²
12m × 6m Area = _____ m ²		8m × 9m Area = _____ m ²

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



The image features a large grid of 20 columns and 20 rows of squares, intended for drawing rectangles. At the bottom of the grid, there is an illustration of four diverse students sitting around a table. From left to right: a girl with dark curly hair and a pink headband wearing a yellow shirt; a boy with orange hair wearing a green polo shirt; a girl with brown hair in a bun wearing a purple shirt; and a girl with glasses and a pink bow wearing a blue shirt. They are looking at a colorful abacus on the table.

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

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

Number	Length	Width	Area =		Length	Width	Area =
a.	6cm	4cm	24cm²	=	8cm	3cm	24cm²
b.	6cm	6cm	36cm²	>	7cm	5cm	35cm²
c.	4cm	7cm	28cm²	>	9cm	3cm	27cm²

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 Area = 54m²	<	8m × 7m Area = 56m²
9m × 9m Area = 81m²	>	10m × 8m Area = 80m²
12m × 6m Area = 72m²	=	8m × 9m Area = 72m²

3. Draw two rectangles with a difference of **1cm²** and compare them using $<$ or $>$.

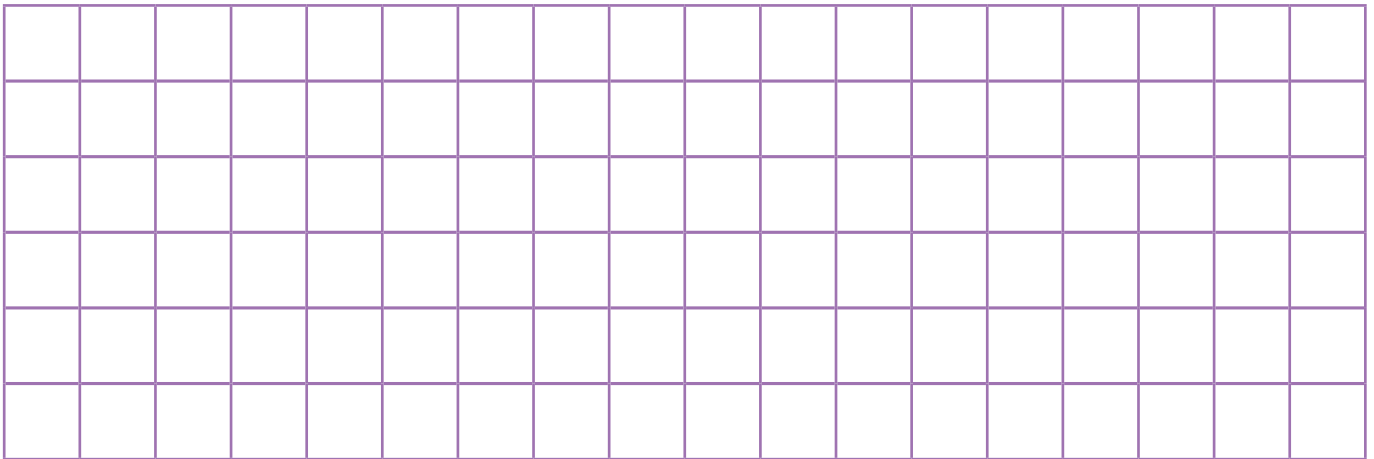
Accept any two rectangles with a difference of 1cm².

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.

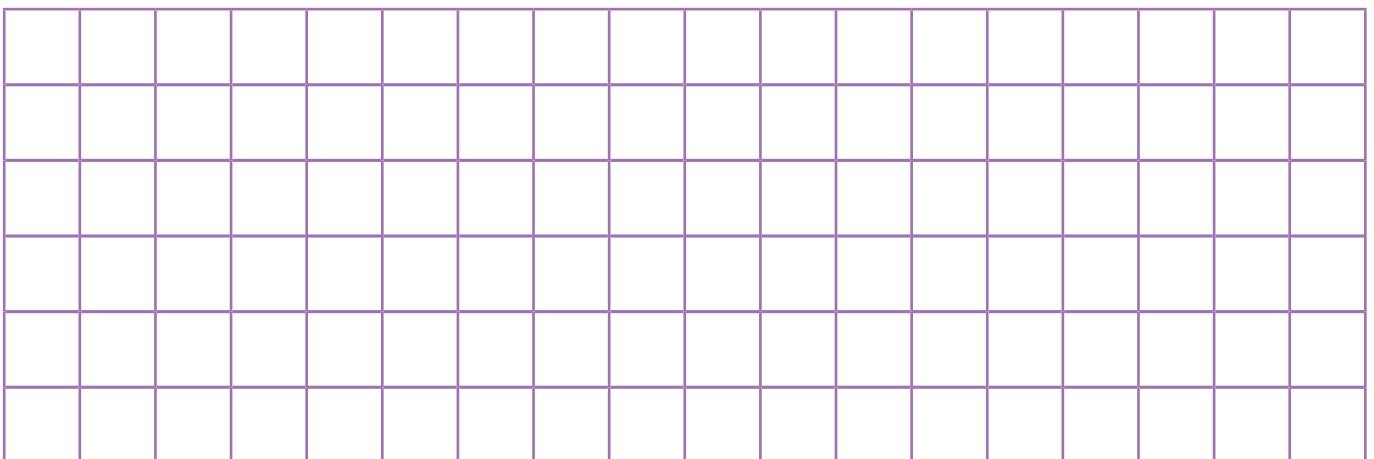
Accept any explanation that shows that the statement is false. For example, a rectangle could be 5cm in length, 4cm in width and have an area of 20cm² while another could have a length of 20cm, a width of 1cm and also have an area of 20cm².

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.

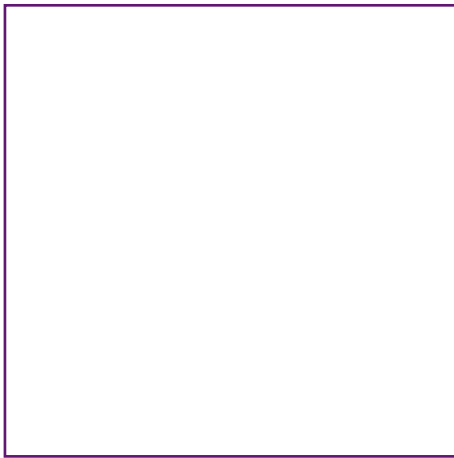
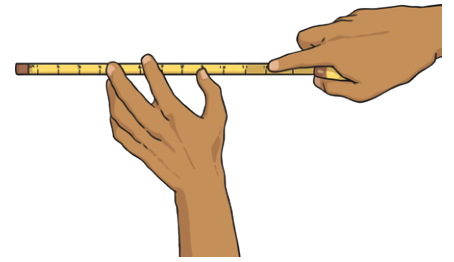


2. **If the length and width are whole numbers, you cannot have a square with an area of 12cm^2 .** Is this statement true or false? Explain your answer fully.



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 .

2. If the length and width are whole numbers, you cannot have a square with an area of 12cm^2 . 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 $6\text{cm} \times 6\text{cm}$, it could be cut in half once and rearranged to make a rectangle with dimensions of $12\text{cm} \times 3\text{cm}$. Both of these rectangles will have an area of 36cm^2 .

