Perimeter and Area

To know how to find the area of compound shapes

Autumn

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Key Vocabulary:

Area
Compound shape

Sentence Stems:

The area is the size of the surface of a 2-D shape.

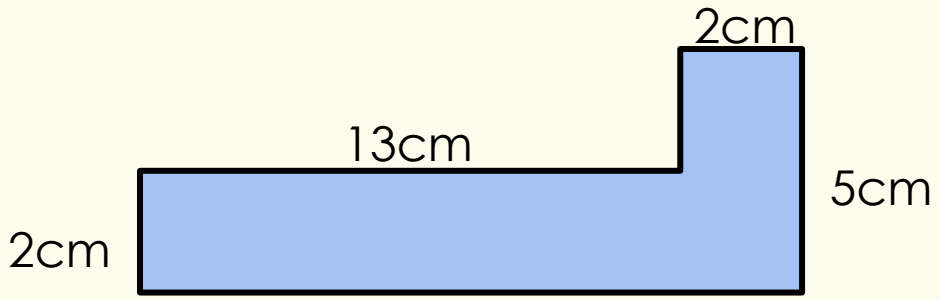
For rectangles, the area of a shape is calculated by multiplying the length by the width.

Area is measured in units squared or unit^2.

To know how to find the area of compound shapes

In Focus:

What is the area of this shape?



A $32cm^2$

C $36cm^2$

B $75cm^2$

D $22cm^2$

To know how to find the area of compound shapes

THIRD SPACE LEARNING

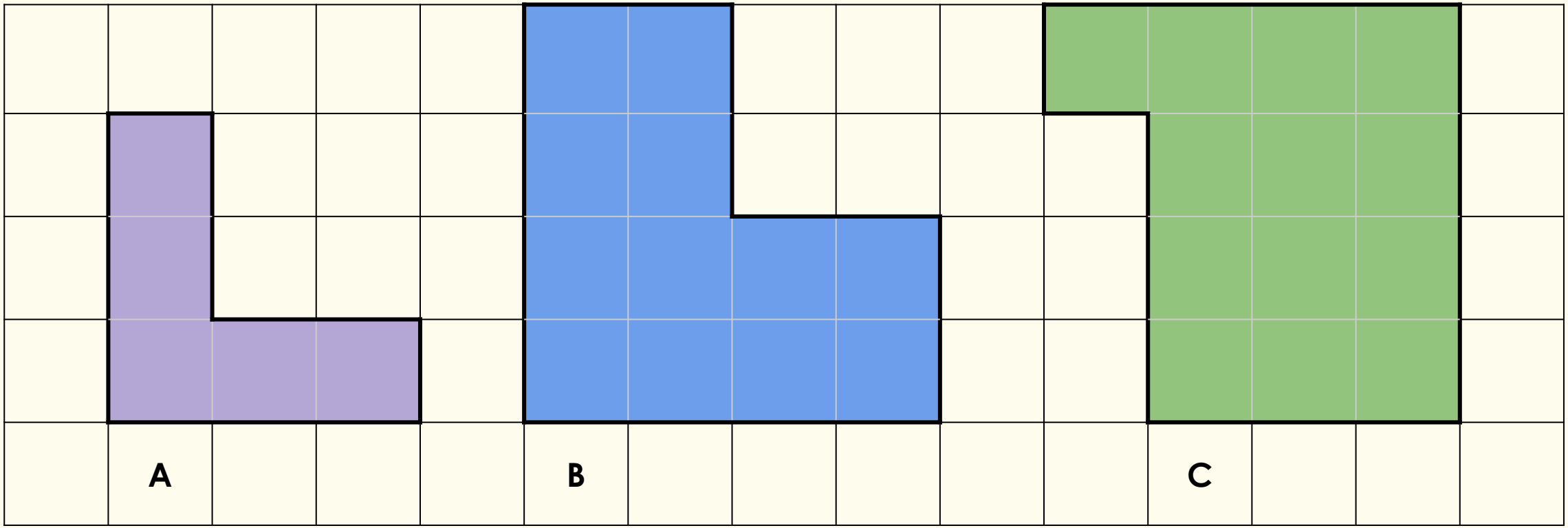
Success Criteria

- ❑ I can split a compound shape into the fewest number of rectangles
- ❑ I can use different methods to find the area of a compound shape
- ❑ I can draw a compound shape with a given area.

To know how to find the area of compound shapes

Starter:

Find the areas of these shapes.



A: 5 squares

B: 12 squares

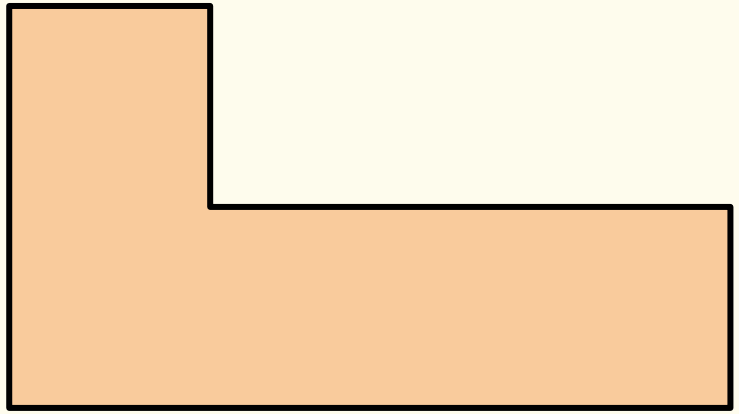
C: 13 squares

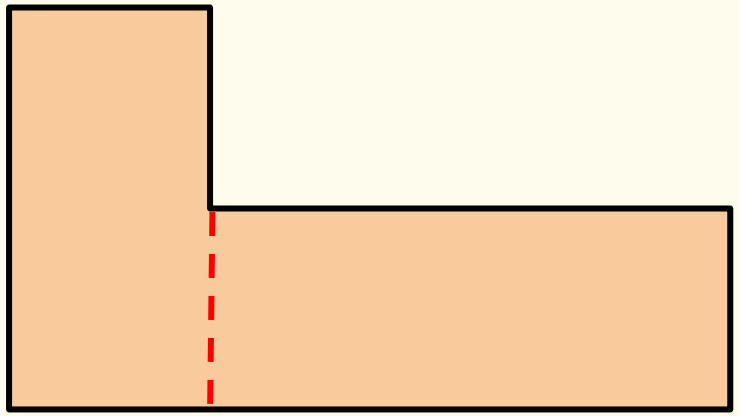
Answers

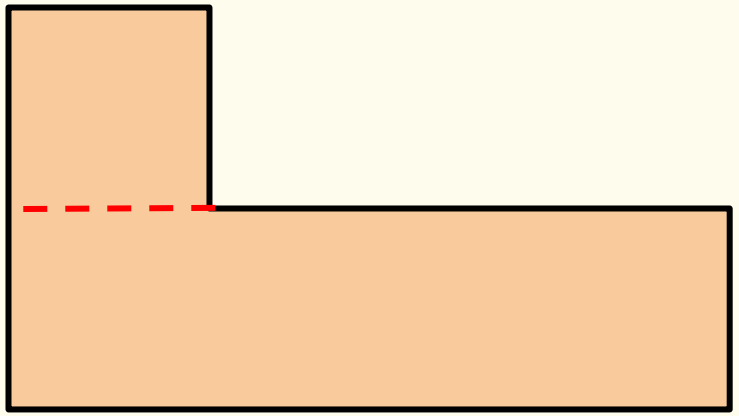
To know how to find the area of compound shapes

How many ways can you split this compound shape into rectangles?

Why is this useful for finding the area of a compound shape?





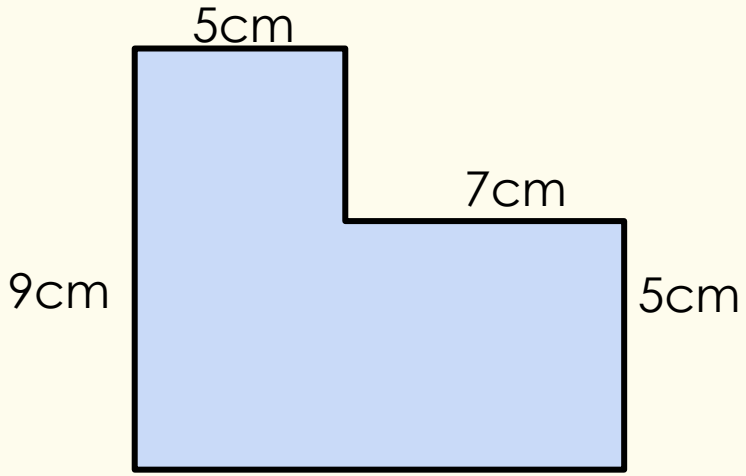


Answers

To know how to find the area of compound shapes

Guided Practice:

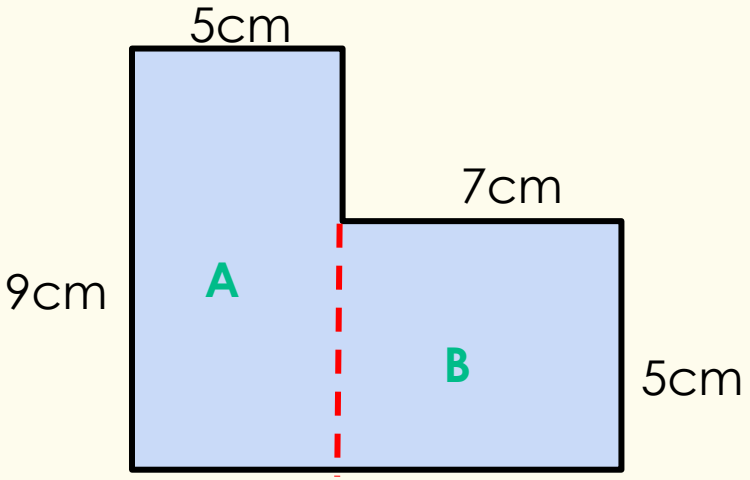
Split the compound shape into the fewest possible rectangles and calculate the area.



Area A: 5cm x 9cm = $45cm^2$

Area B: 7cm x 5cm = $35cm^2$

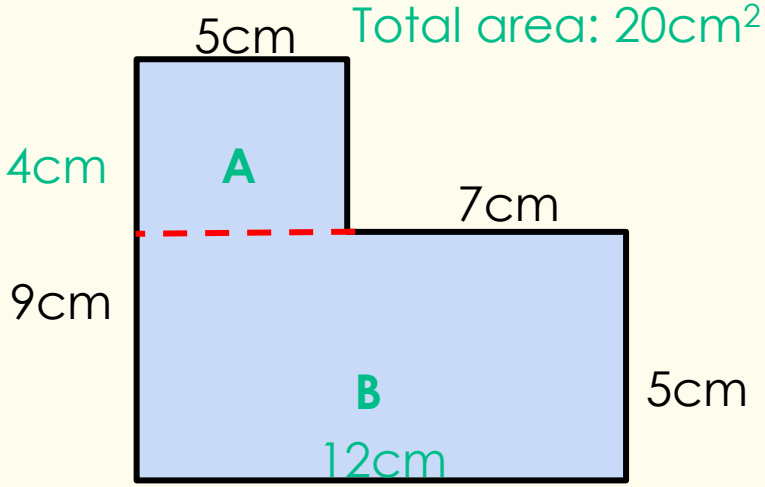
Total area: $45cm^2 + 35cm^2 = 80cm^2$



Area A: 5cm x 4cm = $20cm^2$

Area B: 12cm x 5cm = $60cm^2$

Total area: $20cm^2 + 60cm^2 = 80cm^2$



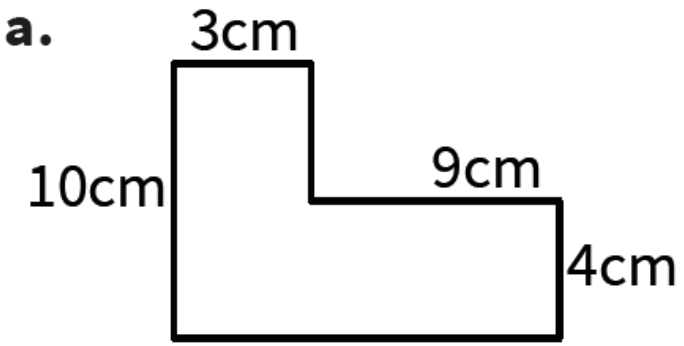
Answers

To know how to find the area of compound shapes

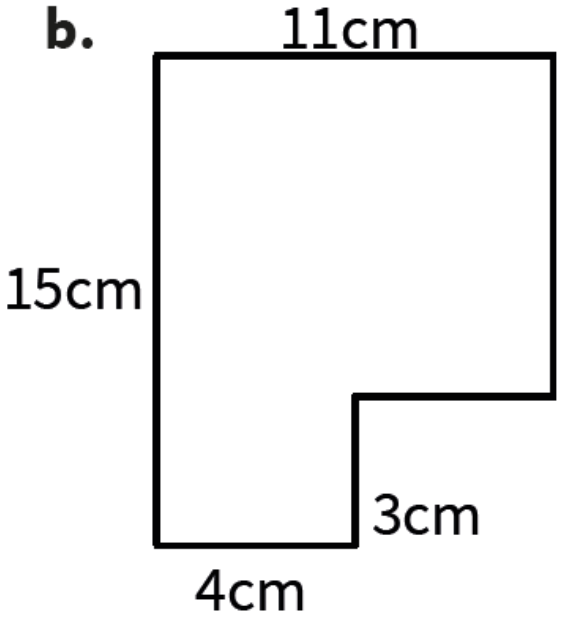
Independent Practice:

1. Find the area of these compound shapes.

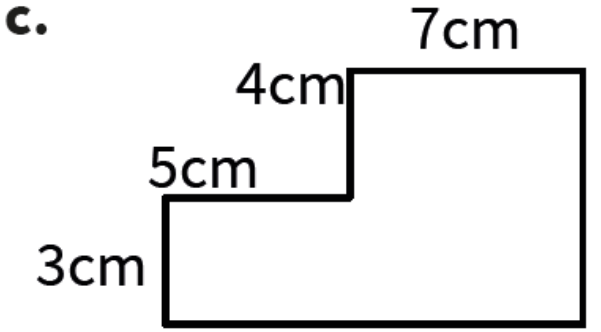
a.



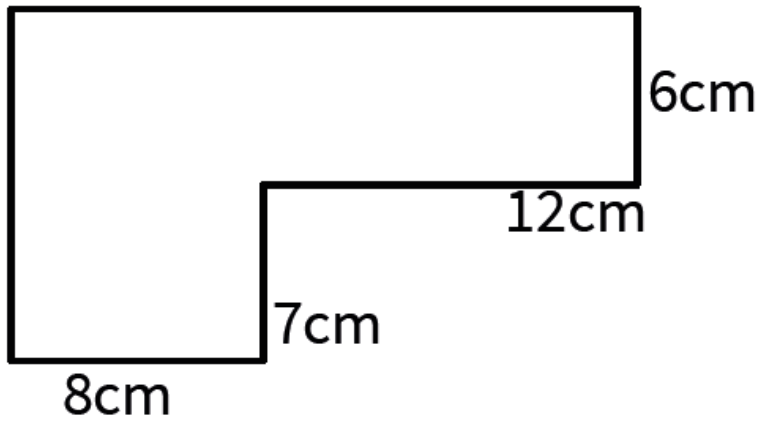
b.



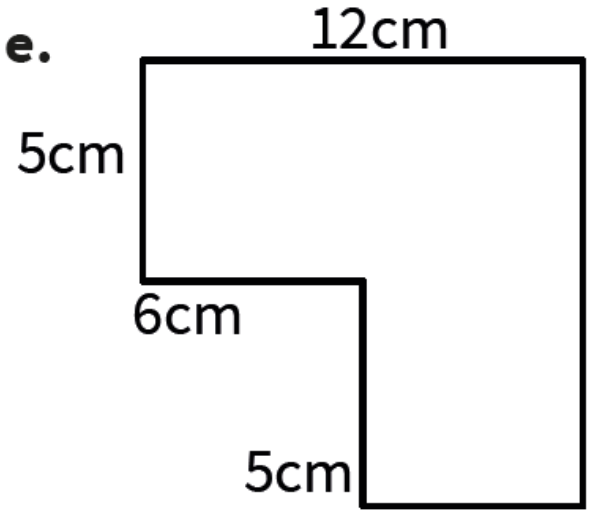
c.



d.



e.

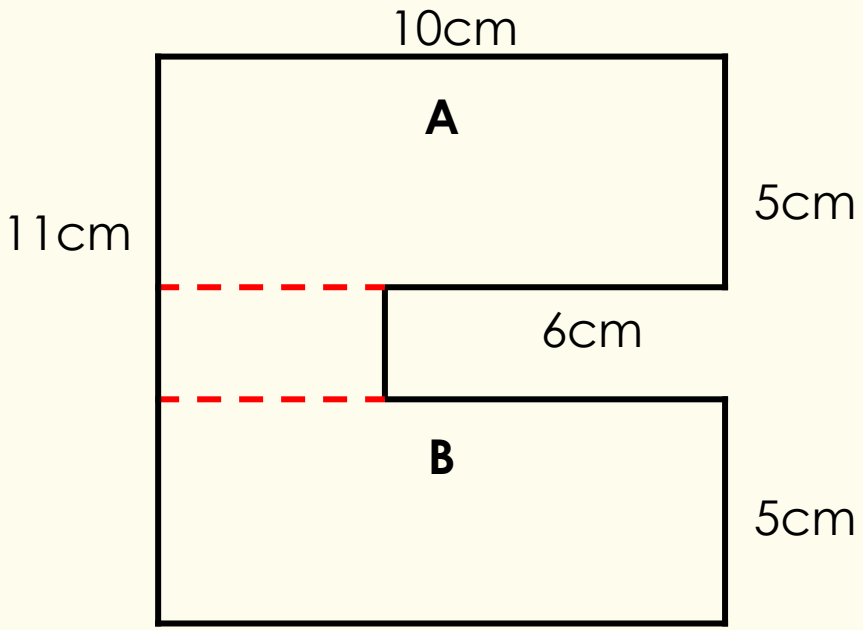


To know how to find the area of compound shapes

Guided Practice:

The astronaut has split the compound shape to find the area.

Explain where the astronaut has gone wrong.



Area of A:

10cm x 5cm = 50cm^2

Area of B:

10cm x 5cm = 50cm^2

Total area:

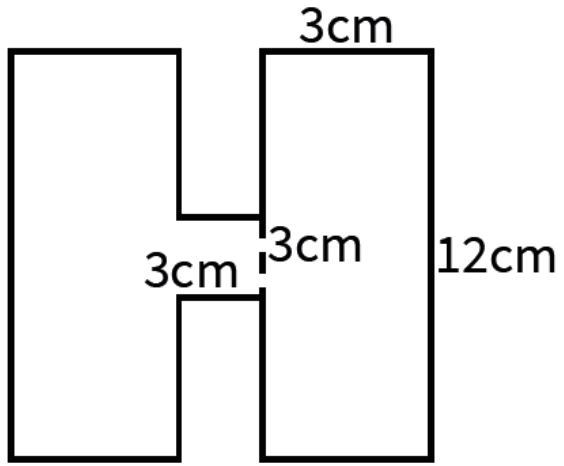
50cm^2 + 50cm^2 = 100cm^2

To know how to find the area of compound shapes

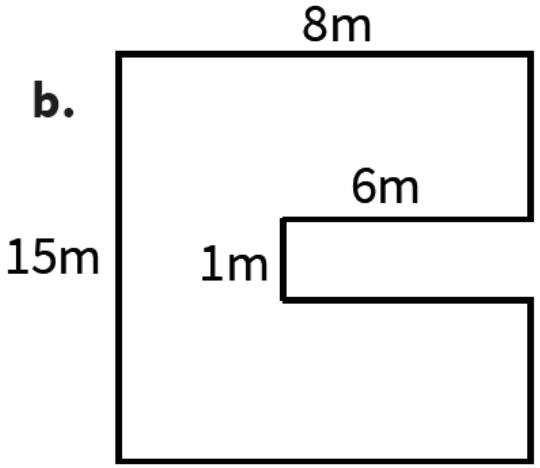
Independent Practice:

2. Find the area of these symmetrical shapes.

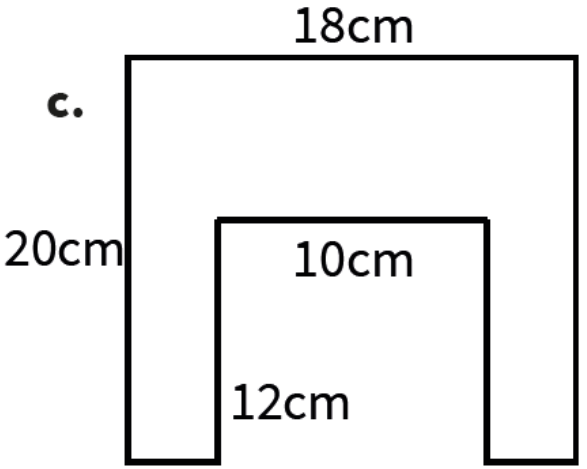
a.



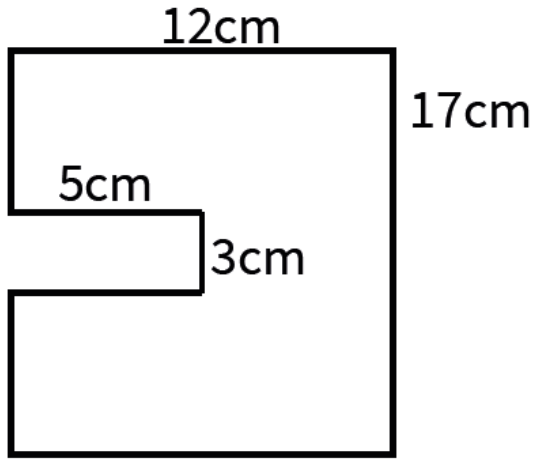
b.



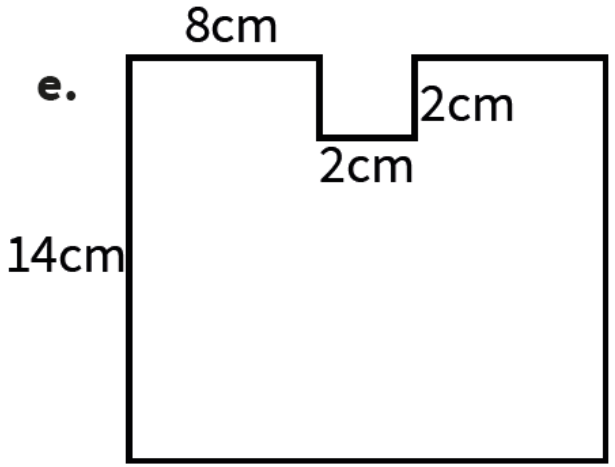
c.



d.



e.



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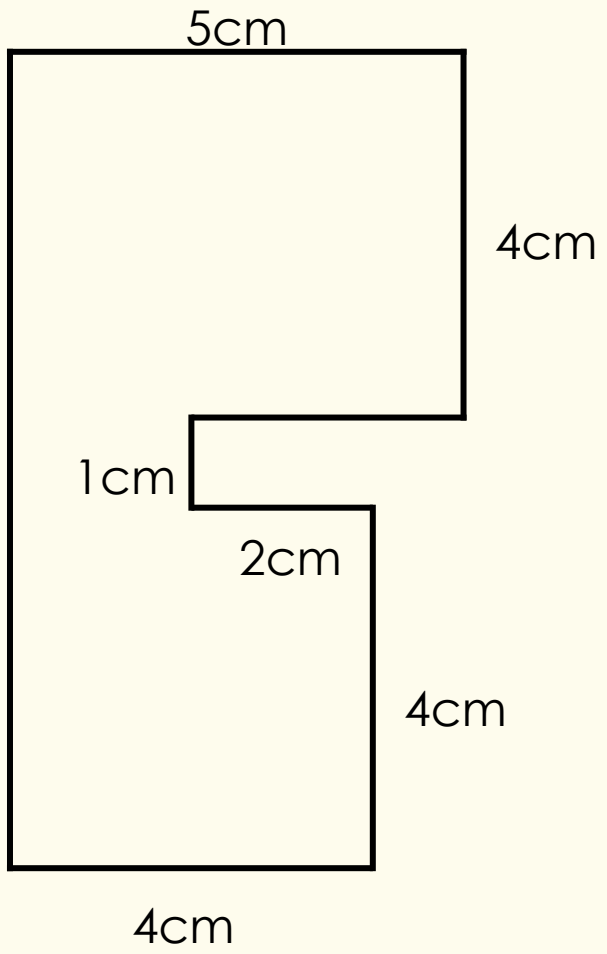
Guided Practice:

The area of the shape is 38cm^2.

Prove this is correct.



To know how to find the area of compound shapes

Independent Practice:

3. Draw at least 4 compound shapes with an area of $38cm^2$.

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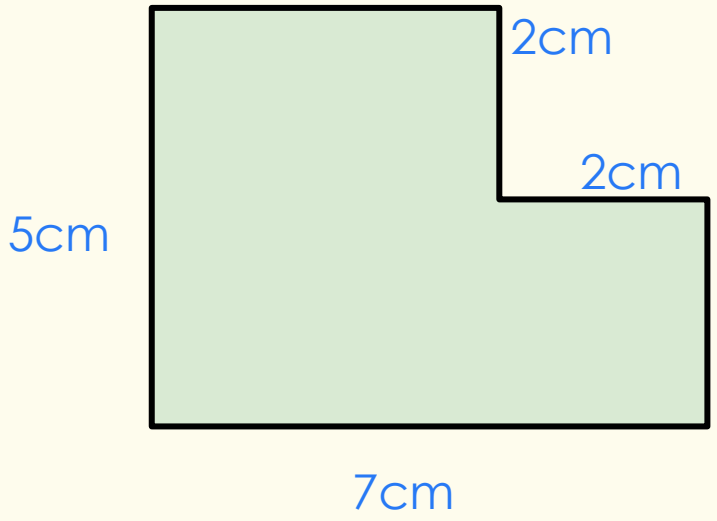
Light Bulb Challenge

Do you agree with this statement?

Explain your answer.

I can find the area of the compound shape by calculating 7cm x 5cm and subtracting 2cm x 2cm.



This statement is correct.

Answers