

## Area of Shapes





## REVISE THIS **TOPIC**

## CHECK YOUR **ANSWERS**



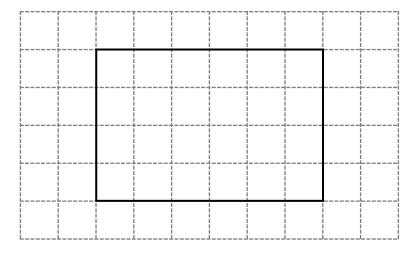
1 Not drawn 6 cm accurately 10 cm Work out the area of the rectangle giving the units of your answer. [2 marks] Answer 2 Not drawn 3 m accurately 8 m Work out the area of the triangle giving the units of your answer. [3 marks]



Answer



**3 (a)** A rectangle is drawn on a centimetre grid.

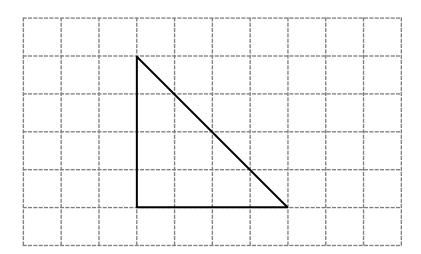


Work out the area of the rectangle.

[1 mark]

Answer\_\_\_\_\_cm<sup>2</sup>

**3 (b)** A triangle is drawn on a centimetre grid.



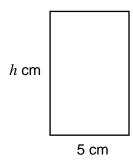
Work out the area of the triangle.

[1 mark]

Answer\_\_\_\_\_cm<sup>2</sup>



4 The rectangle has a base of 5 cm and a height of *h* cm.



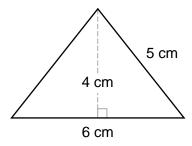
Not drawn accurately

The area of the rectangle is  $40 \text{ cm}^2$  Work out the value of h.

[1 mark]

h =\_\_\_\_cm

5



Not drawn accurately

Work out the area of the triangle.

[2 marks]

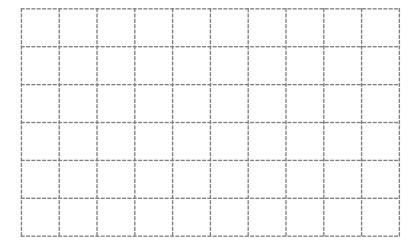
Answer\_\_\_\_\_cm<sup>2</sup>



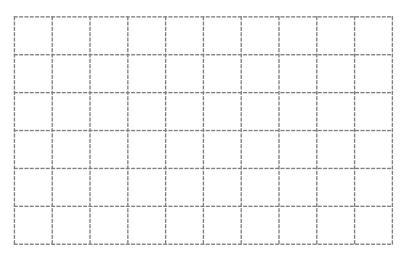




6 (a) On the centimetre grid below, draw a rectangle with an area of 18 cm<sup>2</sup> [1 mark]

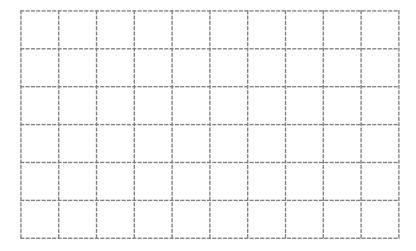


6 (b) On the centimetre grid below, draw a triangle with an area of 12 cm<sup>2</sup> [1 mark]

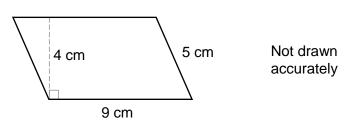


**6 (c)** On the centimetre grid below, draw a parallelogram with an area of 15 cm<sup>2</sup>

[1 mark]



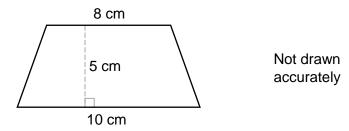
7



Work out the area of the parallelogram. [2 marks]

Answer cm<sup>2</sup>

8



Work out the area of the trapezium [2 marks]

Answer\_\_\_\_\_cm<sup>2</sup>





Triangle

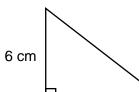
8 cm

**9** Here is a square, triangle and parallelogram.

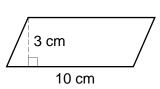
Not drawn accurately

Square

5 cm



**Parallelogram** 



Put the shapes in order of area, starting with the smallest.

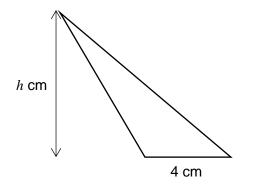
[3 marks]

Smallest area

Largest area



A triangle has a base of 4 cm and a perpendicular height of h cm.



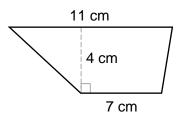
The area of the triangle is  $20 \text{ cm}^2$  Work out the value of h.

[2 marks]

Not drawn accurately

h = \_\_\_\_\_\_\_cm

11



Not drawn accurately

Work out the area of the trapezium

[2 marks]

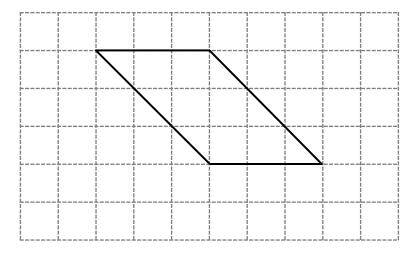
Answer\_\_\_\_\_cm<sup>2</sup>

n over **>** 





**12 (a)** A parallelogram is drawn on a centimetre grid.

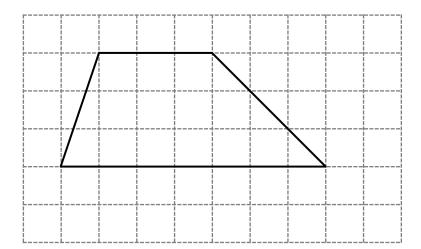


Work out the area of the parallelogram.

[1 mark]

Answer\_\_\_\_\_cm<sup>2</sup>

**12 (b)** A trapezium is drawn on a centimetre grid.



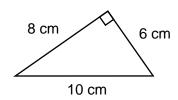
Work out the area of the trapezium

[2 marks]

Answer\_\_\_\_\_cm<sup>2</sup>



13



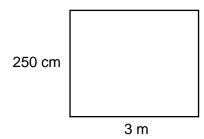
Not drawn accurately

Work out the area of the tri	angle.

[2 marks]

Answer \_\_\_\_\_cm<sup>2</sup>

14



Not drawn accurately

Work out the area of the rectangle. Give your answer in square metres.

[2 marks]

Answer m<sup>2</sup>

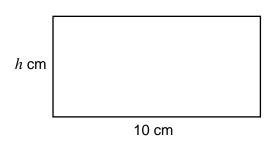
Tu

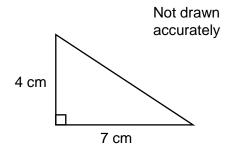






15 Here is a rectangle and a triangle.





The area of the rectangle is 3 times the area of the triangle.

Work out h, the height of the rectangle.

[4 marks]

h =	cm

A square has side length 3.2 cm
Work out the area of the square, giving your answer in square centimetres.





Answer\_\_\_\_\_cm<sup>2</sup>



17 The line AB is one side of a trapezium ABCD which has an area of 21cm<sup>2</sup> The line AB has been drawn on the centimetre grid below. [2 marks] Complete a possible trapezium ABCD. 18 Here are two rectangles. Rectangle B **Rectangle A** Not drawn 3 m 2 cm accurately 6 m 9 cm [1 mark] Tick the correct statement Rectangle A has a greater area than Rectangle B. Rectangle B has a greater area than Rectangle A. Rectangle A has the same area as Rectangle B.

1st

Solutions DE

Turn over ▶

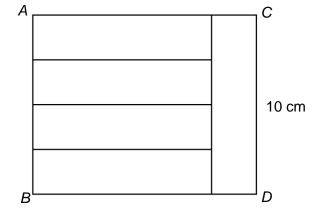
<del>10</del>



19	A rectangle has a base of 30 cm and a height of $h$ cm.	
	h cm	Not drawn accurately
	30 cm	
	The area of the rectangle is $15 \text{ cm}^2$ Work out the value of $h$ .	[1 mark]
	h =	cm
20	Here is a parallelogram and a trapezium	<b>5</b>
	9.6 cm	Not drawn accurately
	The area of the parallelogram one fifth of the area of the Work out $h$ , the perpendicular height of the parallelogram	
	Answer	cm



21 Five congruent rectangles are joined to make rectangle ABCD.



Not drawn accurately

Work out the area of rectangle ABCD.	[4 marks]



Solutions Pro-

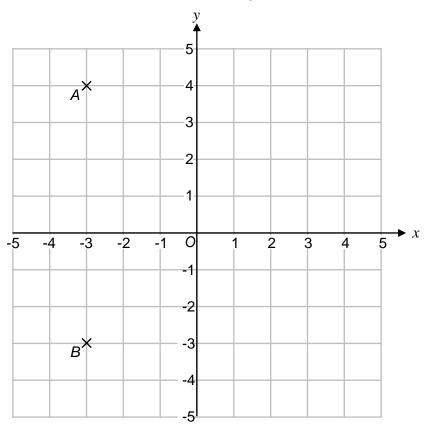
Turn over ▶

cm<sup>2</sup>

Answer\_



Points A and B are shown on the centimetre grid below.



C = (1, 2)

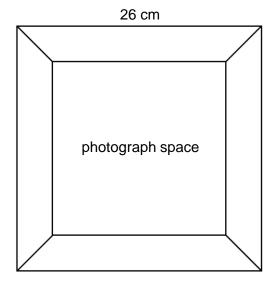
Work out the area of triangle ABC.	[3 marks]



cm<sup>2</sup>

Answer.

A picture frame is made from four congruent trapeziums. 23



Not drawn accurately

The width of the picture frame is 26 cm.

A square photograph will be placed in the photograph space.

The area of the photograph space is 400 cm<sup>2</sup>

Nork out the area of one of the trapeziums that forms the picture frame. [4 marks

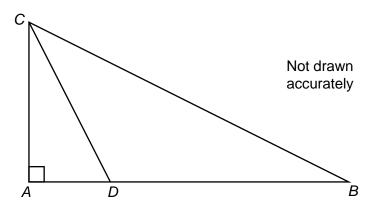
Answer	cm <sup>2</sup>







24 ABC is a triangle.



ABD is a straight line.

AB = 15 cm

AD: DB = 1:4AD: AC = 1:3

Work out the area of triangle BCD.

[4 marks]

Answer cm<sup>2</sup>

