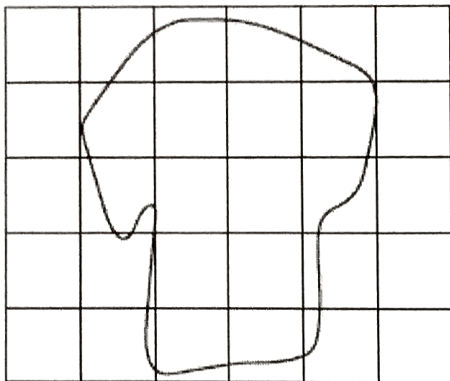


1. The shape below is drawn on a centimetre grid. Estimate the area of the shape.

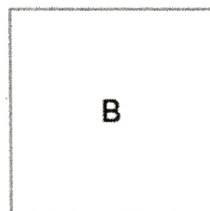
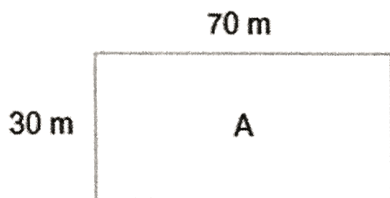


Accept 12-16cm<sup>2</sup>

Answer ..... 14 ..... cm<sup>2</sup>

(Total 1 mark)

2. Field A is a rectangle with sides of 30 m and 70 m.  
Field B is a square with the same **perimeter** as Field A.  
Not drawn accurately



How much bigger in area is Field B than Field A? You **must** show your working.

Area of A =  $30 \times 70 = 2100 \text{ m}^2$

Perimeter =  $2(30 + 70) = 200 \text{ m}$ .

Side of B =  $200 \div 4 = 50 \text{ m}$ .

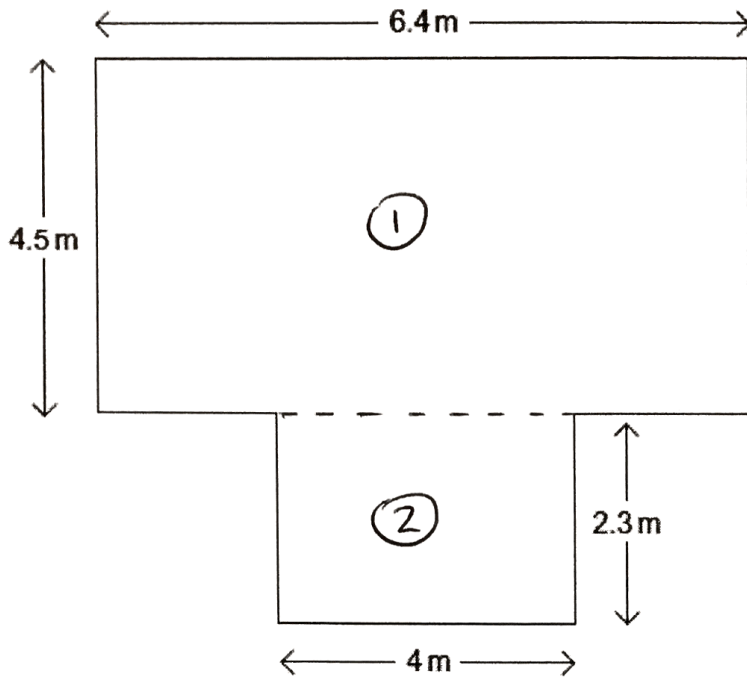
Area of B =  $50^2 = 2500 \text{ m}^2$ .

$2500 - 2100 = 400 \text{ m}^2$

Answer ..... 400 ..... m<sup>2</sup>

(Total 4 marks)

3. This diagram shows Adam's garden. It is in the shape of two rectangles joined together. Not drawn accurately.



$$\begin{array}{r} 45 \\ 64 \times \\ \hline 180 \\ 2700 + \\ \hline 2880 \end{array}$$

Work out the area of the garden.

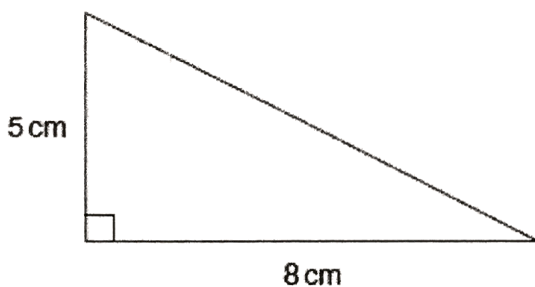
Area of ① =  $4.5 \times 6.4 = 28.8 \text{ m}^2$

Area of ② =  $4 \times 2.3 = 9.2 \text{ m}^2$

Total area =  $28.8 + 9.2 = 38 \text{ m}^2$

Answer ..... 38 .....  $\text{m}^2$   
(Total 4 marks)

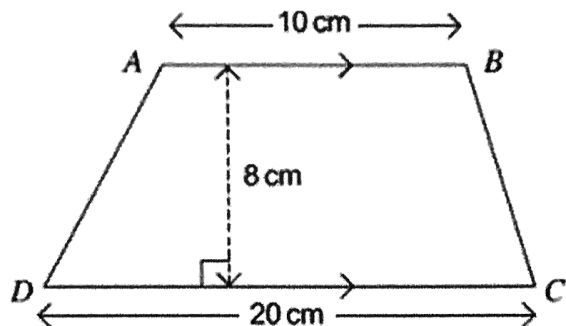
4. Calculate the area of the triangle. Not drawn accurately.



$\frac{5 \times 8}{2} = \frac{40}{2} = 20 \text{ cm}^2$

Answer ..... 20 .....  $\text{cm}^2$   
(Total 2 marks)

5.  $ABCD$  is a trapezium. Not drawn accurately.



Calculate the area of  $ABCD$ . State the units of your answer.

$$\frac{1}{2}(10 + 20)8 = 15 \times 8 = 120 \text{ cm}^2$$

.....

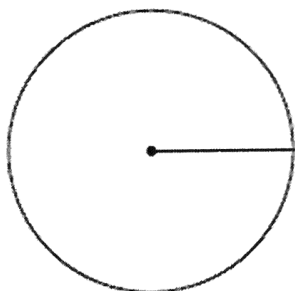
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Answer .....  $120 \text{ cm}^2$  .....  
**(Total 3 marks)**

6. (a) The radius of this circle is 4 cm. Not drawn accurately



$$\begin{array}{r} 16 \\ 31 \times \\ \hline 16 \\ 480 + \\ \hline 496 \end{array}$$

Work out the area. Use  $\pi = 3.1$ .

$$4^2 \times 3.1 = 16 \times 3.1 = 49.6 \text{ cm}^2$$

.....

.....

Answer .....  $49.6$  .....  $\text{cm}^2$   
**(3)**

- (b) The diameter of this semicircle is 16 cm. Not drawn accurately



Work out the perimeter of the semicircle. Use  $\pi = 3.1$ .

$$\frac{16 \times 3.1}{2} + 16 = \frac{49.6}{2} + 16$$

$$= 24.8 + 16$$

$$= 40.8 \text{ cm}$$

Answer ..... 40.8 cm

(3)

(Total 6 marks)

(Total for test = 20 marks)