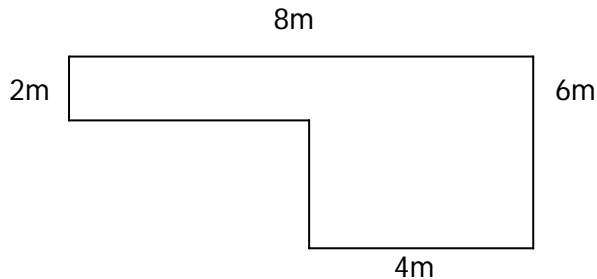




# Perimeter, Circumference and Area

1. The sketch below shows dimensions of a drive.



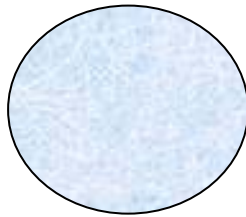
- a) What is the area?  
b) What is the perimeter?

2. A man is looking to buy a pond.

He wants to know the size of the pond from the diagram below/  
What is the area and circumference of the pond?

Radius = 2.5m

$\pi = 3.14$



Area =  $\pi r^2$

Circumference =  $2\pi r$

3. A man has a field measuring 18m by 10m.

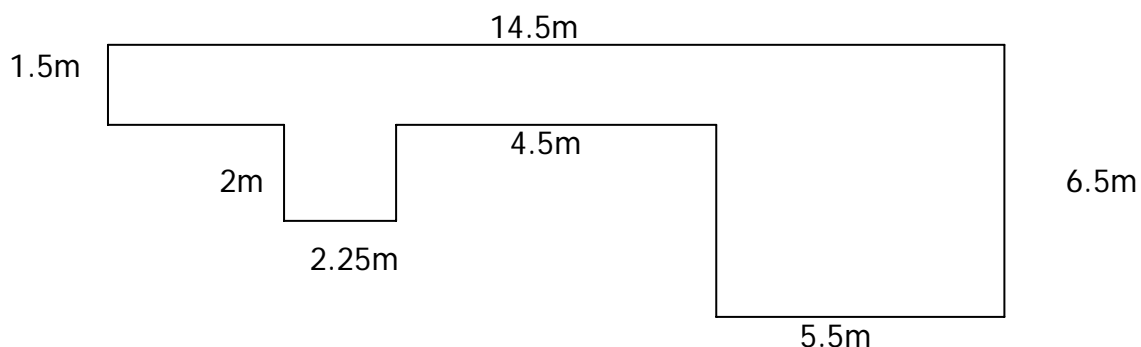
He needs to put a Big Top with a radius of 5m in the field.

How much field will he have left to use if the Big Top goes up?

4. The plan below is of an office block.

The block needs new carpet.

How much carpet will need to be supplied in square metres?



This resource kindly contributed by Ian Saunders, Darlington Borough Council Training Unit [Ian.Saunders@darlington.gov.uk](mailto:Ian.Saunders@darlington.gov.uk)

## Perimeter, Circumference & Area - **Answers**

1. a) area =  **$32\text{m}^2$**   
For example:  $8 + 24$

b) perimeter =  **$28\text{m}$**   
For example:  $8 + 6 + 4 + 4 + 4 + 2$

2. area of pond =  $3.14 \times 2.5^2 =$   **$19.625\text{m}^2$**   
circumference of pond =  $3.14 \times 5 =$   **$15.7\text{m}$**

3. Area of field =  $18 \times 10 = 180\text{m}^2$   
Area of Big Top =  $\pi 5^2 = 3.14 \times 25 = 78.5\text{m}^2$

Remaining area of field =  $180\text{m}^2 - 78.5\text{m}^2 =$   **$101.5\text{m}^2$**

4. Area of carpet =  **$53.75\text{m}^2$**   
For example:  $21.75 + 4.5 + 27.5$