## HOME EXERCISE 8

Set out carefully all appropriate working.

1. The graph shown has equation $y=1 / 2 x+3$.

Use the equation to find the values of $a, b$ and $c$.

2. The triangles shown are right-angled.


Calculate the values of x and y , correct to $\mathbf{3}$ significant figures.
3. After the price of a radio is increased by $25 \%$ it costs $£ 105$.

Calculate the original price of the radio before the increase.
4. The prism shown has an end-face which is a pentagon.

The pentagon consists of a trapezium and a triangle with the dimensions shown on the second diagram.
The prism has a length of 80 cm .

(a) Calculate the area of the end-face.
(b) Hence calculate the volume of the prism.

Total 20 marks

