

Ex 10 Areas & Volumes

Section A (Non-calculator)

1 Evaluate –

a) $\frac{3}{7} \times \frac{4}{15}$

c) $6 \cdot 1 + 6 \times 1 \cdot 42 - 5$

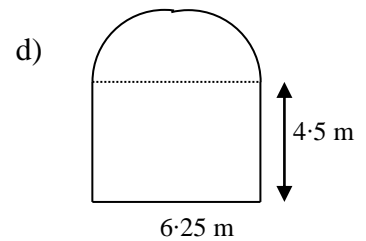
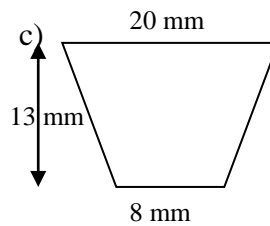
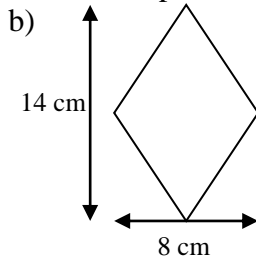
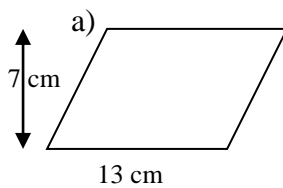
b) 15% of £86

d) $x^2 + 2y^2$ where $x = -3$ and $y = 4$

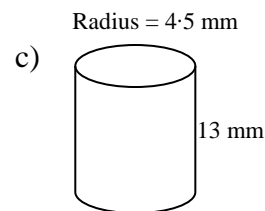
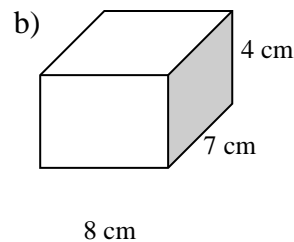
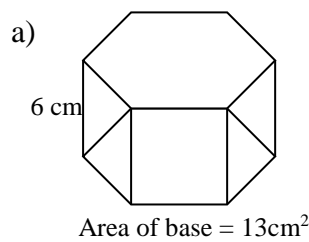
Section B (Knowledge)

Only use your calculator if you need to!

2 Calculate the area of each shape

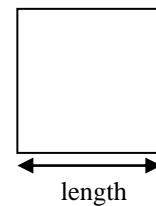
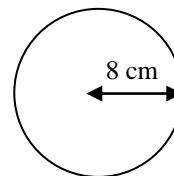


3 Calculate the volume of each prism.



4 The base of a round cake tin has the same area as the base of a square cake tin. The round cake tin has a radius of 8 centimetres.

What is the length of the base of the square cake tin?



- 5 A drinks container is in the shape of a cylinder with radius 20 centimetres and height 50 cm.

- (a) Calculate the volume of the drinks container

Give your answer in cubic centimetres correct to two significant figures

Liquid from the full container can fill 800 cups, in the shape of cones,

each of radius 3 centimetres.

- (b) What will be the height of the liquid in each cup
(to 2 significant figures)?

