



Solve

$$\frac{18 - x}{3} = 1 - 2x$$

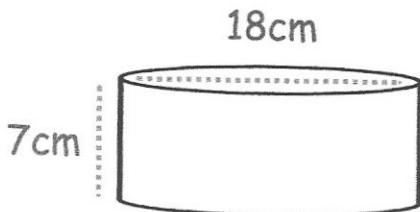
$$\begin{array}{r} 18 - x = 3 - 6x \\ +6x \quad \quad +6x \end{array}$$

$$18 + 5x = 3$$

$$\begin{array}{r} -18 \quad -18 \\ 5x = -15 \end{array}$$

$$\div 5 \quad \div 5$$

$$x = -3$$



Calculate the volume of the cylinder.
Give your answer in terms of π

$$\begin{aligned} \pi \times 9^2 \times 7 \\ = 567\pi \text{ cm}^3 \end{aligned}$$

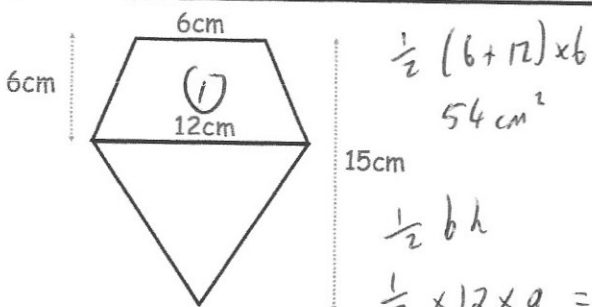
$$(2.4 \times 10^6) = (2 \times 10^6) + y$$

Find y

$$4 \times 10^5$$

$$2400000 = 2000000 + y$$

$$y = 400000$$



$$\begin{aligned} \frac{1}{2} (6 + 12) \times 6 \\ 54 \text{ cm}^2 \end{aligned}$$

$$\frac{1}{2} b h$$

$$\frac{1}{2} \times 12 \times 9 = 54 \text{ cm}^2$$

Work out the area of the logo.

$$108 \text{ cm}^2$$

$$a = \begin{pmatrix} 4 \\ -5 \end{pmatrix} \quad b = \begin{pmatrix} 7 \\ 1 \end{pmatrix} \quad 3a = \begin{pmatrix} 12 \\ -15 \end{pmatrix}$$

$$\begin{pmatrix} 5 \\ -16 \end{pmatrix}$$

Work out $3a - b$ as a column vector