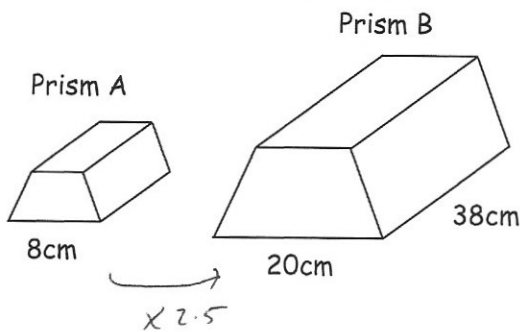


A rectangle has a length of 14cm and width of 5cm, both to nearest centimetre.

Find the upper bound for the perimeter of the rectangle.

$$14.5 + 5.5 + 14.5 + 5.5$$

$$40 \text{ cm}$$



Prism A and Prism B are similar. Prism A has a cross-sectional area of  $25\text{cm}^2$

Work out the volume of prism B.

$$25 \times 2.5^2 = 156.25$$

$$156.25 \times 38 = 5937.5 \text{ cm}^3$$

$$\sqrt{x} = 9\sqrt{2}$$

Find x

$$\sqrt{81} \times \sqrt{2}$$

$$= \sqrt{162}$$

$$x = 162$$

Make u the subject

$$v^2 = u^2 + 2as$$

$$-2as \quad -2as$$

$$v^2 - 2as = u^2$$

$$u = \pm \sqrt{v^2 - 2as}$$

Marley invests £4000 in a savings account for 2 years at a rate of X% compound interest per annum. At the end of the 2 years, Marley pays tax on the interest at a rate of 25%. After paying tax he gets £121.20

~~Marley~~ ~~Marley~~

Work out the value of X

$$75\% \text{ of interest} = £121.20$$

$$100\% \text{ of interest} = £161.60$$

$$4000 \times y^2 = 4161.60$$

$$y^2 = 1.0404$$

$$y = 1.02 \quad 2\% \quad X = 2$$