

23rd January



Corbettmaths

Factorise

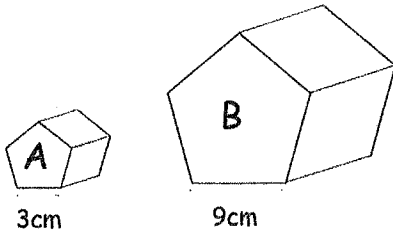
$$3x^2 - 13x + 4$$

$$(3x-1)(x-4)$$

Work out

$$25^{1/2} \div 3^{-2}$$

$$5 \div \frac{1}{9} = 45$$



The prisms are similar.

The volume of prism A is 15cm^3

Work out the volume of prism B.

$$15 \times 27 = 405\text{cm}^3$$

Victor is y years old.His brother Fred is four years ^{old} than Victor.

The product of their ages is 780.

Set up an equation to represent this information and solve to find Victor's age.

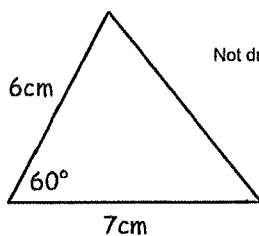
$$y(y+4) = 780$$

$$y^2 + 4y - 780 = 0$$

$$(y+30)(y-26)$$

$$y = -30 \times$$

$$y = 26$$



Not drawn to scale.

Find the area of this triangle.

$$\frac{1}{2} \times 6 \times 7 \times \sin 60$$

$$= 18.2\text{cm}^2 \text{ (3sf)}$$