

12th August



Corbettmaths

Write as a fraction

$$64^{-\frac{2}{3}}$$

$$\frac{1}{16}$$

Donald saves some of his pocket money each week.

He saves 8p in week 1, 16p in week 2, 26p in week 3, 38p and so on for 20 weeks.

Find the amount he saves in week 20.

$$8 \quad 16 \quad 26 \quad 38$$

$$8 \quad 10 \quad 12$$

$$2 \quad 2$$

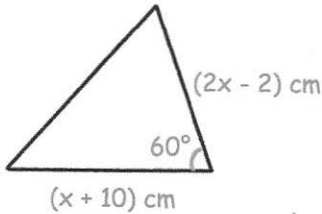
$$n^2 + 5n + 2$$

$$a=1$$

$$b=5$$

$$c=2$$

$$£5.02$$



$$\frac{1}{2} (x+10)(2x-2) \sin 60 = 90\sqrt{3}$$

The area of the triangle is $90\sqrt{3} \text{ cm}^2$ Work out the value of x .

$$\frac{\sqrt{3}}{4} (x+10)(2x-2) = 90\sqrt{3}$$

$$2x^2 - 2x + 20x - 20 = 360$$

$$2x^2 + 18x - 380 = 0 \quad (x+19)(x-10) = 0$$

$$x^2 + 9x - 190 = 0 \quad x = -19 \text{ or } x = 10$$

The circle C has equation $x^2 + y^2 = 4$ $r=2$

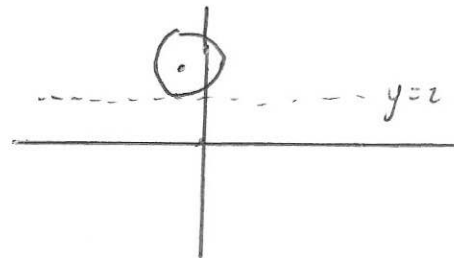
The circle is reflected in the line $y = 2$ to give circle D

Circle D is translated by the vector

$$\begin{pmatrix} -1 \\ 0 \end{pmatrix} \text{ 1 left}$$

to give circle E

Draw a sketch of circle E



Write down the coordinates of the centre of circle E.

$$(-1, 4)$$