



Write 0.0282828... as a simplified fraction

$$x = 0.02828\dots$$

$$10x = 0.2828\dots$$

$$1000x = 28.2828\dots$$

$$990x = 28$$

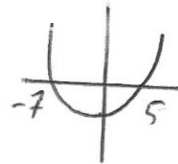
$$x = \frac{28}{990} = \frac{14}{495}$$

Solve the inequality

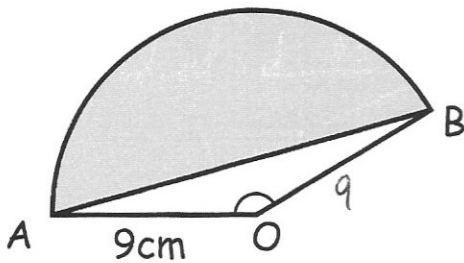
$$x^2 + 2x - 35 > 0$$

$$(x + 7)(x - 5)$$

$$x = -7 \quad x = 5$$



$$x < -7 \text{ or } x > 5$$



$$\Delta AOB = \frac{1}{2} \times 9 \times 9 \times \sin 150 = 20.25$$

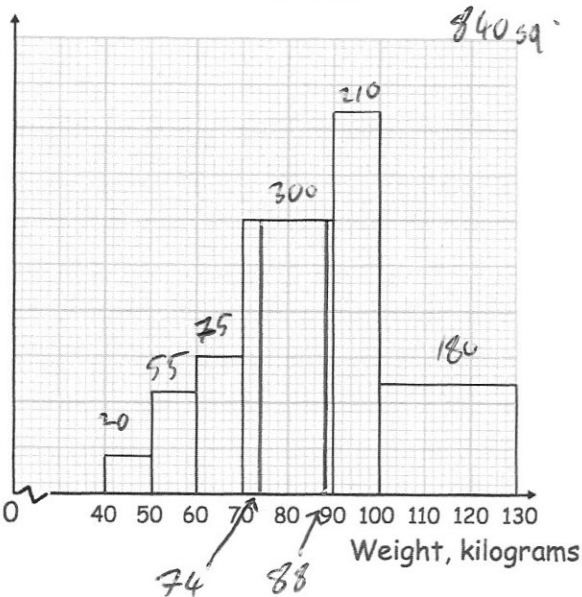
Angle AOB = 150°

Find the area of the segment.

$$\text{Sector AOB} = \frac{150}{360} \times \pi \times 9^2$$

$$= 106.0287521$$

$$106.0287521 - 20.25 = 85.78 \text{ cm}^2$$



The histogram shows the weights of some athletes

Work out an estimate of the median

420 squares

$$420 - 20 - 55 - 75 = 270 \text{ squares}$$

88 kg

Work out an estimate of the lower quartile

210 sq.

$$210 - 20 - 55 - 75 = 60 \text{ squares}$$

74 kg