

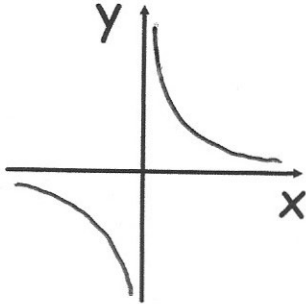


Nicola says all square numbers have an odd number of factors.

Explain why Nicola is correct.

A square number such as  $k^2$ , will always have  $k$  as a factor

e.g. 25  
 $1 \times 25$   
 $5 \times 5$   
 1, 5, 25

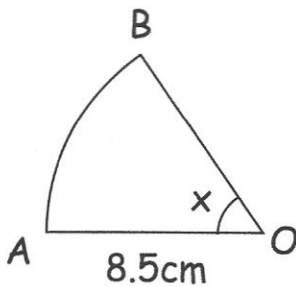


Sketch  $y = \frac{1}{x}$  where  $x \neq 0$

Aminah has 72 DVDs.  
 This number of DVDs is 80% more than the number she had last month.

How many DVDs did Aminah have last month?

180% of  $y = 72$   
 1% of  $y = 0.4$   
 100% of  $y = 40$



The area of sector OAB is  $30\text{cm}^2$   
 Find  $x$ .

$$\frac{x}{360} \times \pi \times 8.5^2 = 30$$

$$x = 47.58^\circ$$

Declan ran a distance of 200m in a time of 26.2 seconds.

The distance of 200m was measured to the nearest 10 metres.

The time of 26.2 was measured to the nearest tenth of a second.

$\frac{195}{26.25}$

Work out the lower bound for Declan's average speed.

$$\text{min speed} = \frac{\text{min distance}}{\text{max time}}$$

$$= \frac{195}{26.25}$$

$$= 7.42857 \text{ m/s}$$