

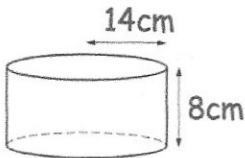
Solve $3x^2 - 75 = 0$

$$x^2 - 25 = 0$$

$$x^2 = 25$$

$$x = \pm 5$$

$$x = 5 \text{ or } x = -5$$



A solid metal cylinder is melted down and the metal is made into solid spheres of radius 4cm.

$$V = \pi \times 14^2 \times 8$$

$$= 4926.017... \text{ cm}^3$$

How many spheres are made?

$$V = \frac{4}{3} \pi \times 4^3 = 268.08...$$

$$18.37...$$

$$\underline{\underline{18}}$$

Tyrone invests £500 in a savings account that pays 2% compound interest.

How many years will it take for Tyrone to earn at least £600 in interest?

$$\pounds 1100$$

$$500 \times 1.02^{39} = 1082.37..$$

$$500 \times 1.02^{40} = 1104.019..$$

$$40 \text{ years}$$

In a netball league there are 8 teams. Each team plays each other team once.

Work out the total number of matches played.

$$7 + 6 + 5 + 4 + 3 + 2 + 1$$

$$28$$

In 1892 a woman's age was the square root of the number of the year of her birth.

$$\sqrt{1849} = 43$$

When was she born?

$$1849 + 43 = 1892 \checkmark$$

$$1849$$