



The distance between the Sun and Earth is 150,000,000 km, correct to 2 significant figures.

Write down the lower bound

$$145,000,000 \text{ km}$$

Write down the upper bound

$$155,000,000 \text{ km}$$

What number does not have a reciprocal?

$$0$$

Write down the equation of the line that is perpendicular to $3x - y = 1$ and passes through $(0, 7)$

$$y = 3x - 1$$

$$m = 3$$

$$y = -\frac{1}{3}x + 7$$

Solve using the quadratic formula

$$x^2 + 2x - 10 = 0$$

$$a = 1 \quad b = 2 \quad c = -10$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$x = \frac{-2 \pm \sqrt{4 - (-40)}}{2}$$

$$x = \frac{-2 \pm \sqrt{44}}{2}$$

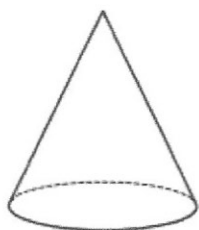
$$x = 2.317 \quad \text{or} \quad x = -4.317$$

Cone A



8cm

Cone B



Cone A and cone B are similar.

The surface area of cone A is 120cm^2

The surface area of cone B is 1080cm^2

The diameter of cone A is 8cm.

Work out the diameter of cone B.

$$\sqrt{9} = 3$$

$$8 \times 3 = 24 \text{ cm}$$