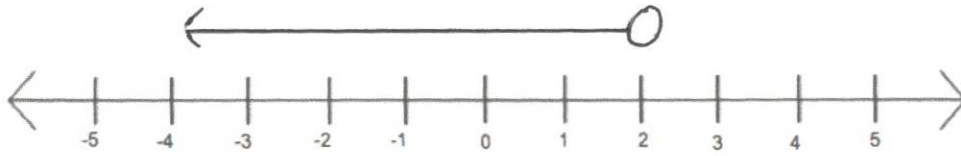


13th January



Corbettmaths

Draw $x < 2$ on the number line.



Factorise $x^2 + 12x + 35$

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

Factorise $x^2 - 10x + 25$

$$(x - 5)(x - 5)$$

A bicycle wheel has diameter 80cm.
The bicycle travels 50m.

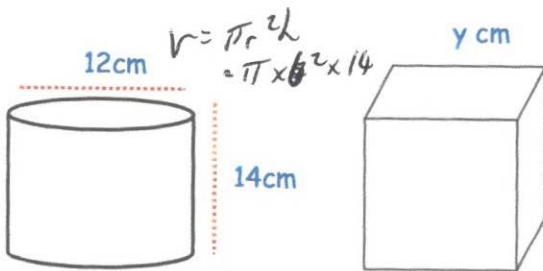
How many complete revolutions does the wheel make?

$$C = \pi \times 0.8$$

$$= 2.513... \text{ m}$$

$$50 \div 2.513... = 19.89...$$

19 complete revolutions



$$1583.362... \text{ cm}^3$$

A cube has side length y cm.
The cylinder and cube has the same volume.

Find y $\sqrt[3]{1583.362...}$

$$11.655 \text{ cm}$$

Solve the simultaneous equations

$$\begin{array}{r} 5x + 3y = 41 \\ 2x + 3y = 20 \quad \text{subtract} \\ \hline 3x = 21 \end{array}$$

Do not use trial and improvement

$$14 + 3y = 20$$

$$x = 7 \quad y = 2$$