

16th February



Corbettmaths

A bicycle wheel has diameter 80cm.
The bicycle travels 5000m.

5000 cm

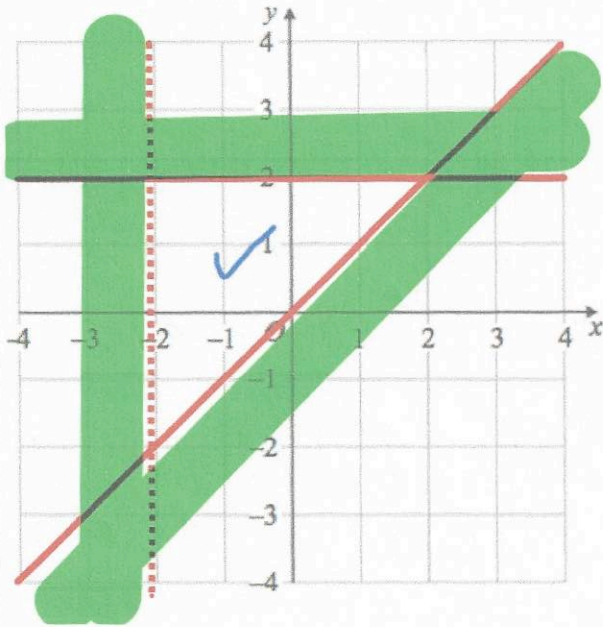
How many complete revolutions
does the wheel make?

$$C = \pi \times d$$

$$= \pi \times 80 = 251.327 \dots \text{ cm}$$

$$5000 \div 251.327 \dots = 19.89 \dots$$

19 complete revolutions



The diagram shows a region which
satisfies 3 inequalities.

Find the inequalities

$$x > -2, \quad y \leq 2,$$

$$y \geq x$$

A square has side length 6cm
measured to the nearest millimetre.

What is the upper limit of its area?

60 mm

Upper limit of side 60.5 mm

$$60.5 \text{ mm} \times 60.5 \text{ mm} \\ = 3660.25 \text{ mm}^2$$

or

$$6.05 \times 6.05 = \\ 36.6025 \text{ cm}^2$$

a:b is 4:9
c is 20% of a.

$$\text{let } a = 40$$

$$b = 90$$

Work out b:c

$$\text{then } c = 8$$

$$90 : 8$$

$$45 : 4$$

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