

12th June



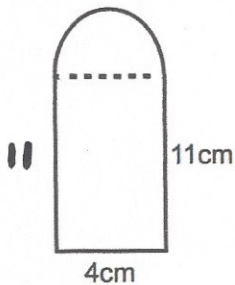
Corbettmaths

Work out

$$10^{-2}$$

Give your answer as a fraction.

$$\frac{1}{100}$$



Shown is a compound shape made from a rectangle and semi-circle.

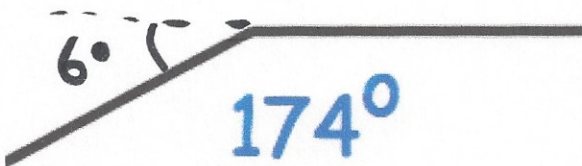
Calculate the perimeter of the shape.

$$\begin{aligned} \pi \times 4 \div 2 &= 6.283 \\ +11 + 11 + 4 &= \underline{32.28 \text{ cm}} \end{aligned}$$

Expand and simplify

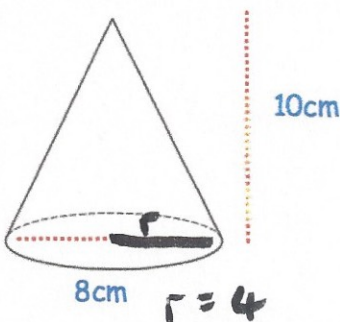
$$5(3x + 2) - 3(2x - 5)$$

$$\begin{aligned} 15x + 10 - 6x + 15 \\ = \underline{9x + 25} \end{aligned}$$



Shown is part of a regular polygon. How many sides does it have?

$$\begin{aligned} 360 \div 6 &= 60 \\ \underline{60 \text{ sides}} \end{aligned}$$



Calculate the volume of the cone.

$$\begin{aligned} \pi \times 4^2 &= 16\pi \\ V &= \frac{1}{3} \times 16\pi \times 10 = \frac{160\pi}{3} \\ &= \underline{167.55 \text{ cm}^3} \end{aligned}$$