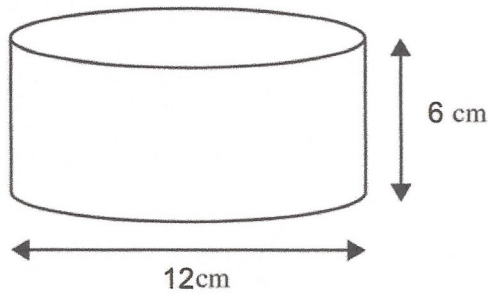


7th August



Corbettmaths



Calculate the volume.
Give your answer in terms of π

$$V = \pi r^2 h$$

$$V = \pi \times 6^2 \times 6$$

$$= 216\pi \text{ cm}^3$$

A light flashes every 50 seconds.
A buzzer buzzes every 3 minutes.

180 seconds

They both operate, how long until they both operate again?

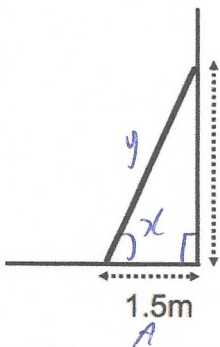
180, 360, 540, 720, 900

900 seconds
(15 minutes)

Calculate the density of a piece of wood with a mass of 80g and a volume of 90cm³

$$d = \frac{m}{v} = \frac{80}{90}$$

0.88... g/cm³



$$\tan x = \frac{5.8}{1.5}$$

$$\tan^{-1} \left(\frac{5.8}{1.5} \right)$$

A ladder is placed against a wall.
To be safe, it must be inclined at between 70° and 80° to the ground.

Is the ladder safe?

$x = 75.499...$
yes.

Calculate the length of the ladder.

$$y^2 = 1.5^2 + 5.8^2$$

$$y^2 = 35.89$$

$$y = 5.99 \text{ m}$$