

Name _____

Date _____

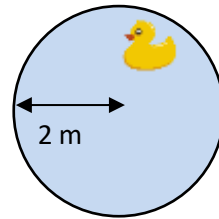


AREA OF A CIRCLE WORD PROBLEMS 1B

Work out these area problems – give your answers to 1 decimal place where appropriate.

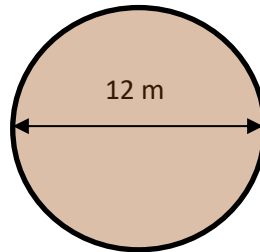
Working out

- 1) A circular pond has a radius of 2m.
Work out the area of the pond.



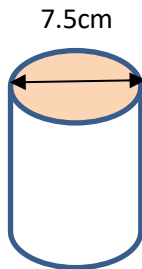
Area of the pond is _____ m².

- 2) Captain digs a 12m wide circular hole in his garden.
What is the area of his hole?



Area of the hole is _____ .

- 3) A tin of beans has a diameter of 7.5cm.
What is the area of the top of the tin?



Area of the top of the tin is _____ .

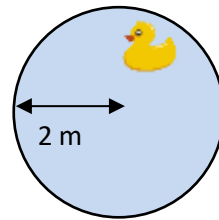


AREA OF A CIRCLE WORD PROBLEMS 1B ANSWERS

Working out

- 1) A circular pond has a radius of 2m.
Work out the area of the pond.

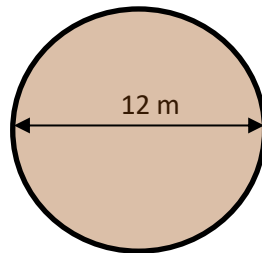
$$\begin{aligned} \text{Area of pond} &= \pi r^2 \\ \text{So area} &= \pi \times 2^2 = \pi \times 4 \\ &= 12.6 \text{ m}^2 \end{aligned}$$



Area of the pond is 12.6 m².

- 2) Captain digs a 12m wide circular hole in his garden.
What is the area of his hole?

$$\begin{aligned} \text{Radius of hole} \\ &= 12 \div 2 = 6 \text{ m} \end{aligned}$$

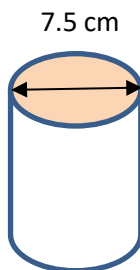


$$\begin{aligned} \text{Area} &= \pi r^2 = \pi \times 6^2 = \\ &36\pi = 113.1 \text{ m}^2 \end{aligned}$$

Area of the hole is 113.1 m².

- 3) A tin of beans has a diameter of 7.5cm.
What is the area of the top of the tin?

$$\begin{aligned} \text{Radius of top of tin} \\ &= 7.5 \div 2 = 3.75 \text{ cm} \end{aligned}$$



$$\begin{aligned} \text{Area} &= \pi r^2 = \pi \times 3.75^2 = \\ &= 44.2 \text{ square cm} \end{aligned}$$

Area of the top of the tin is 44.2 cm².