

Name _____

Date _____

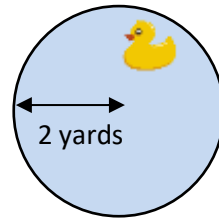


AREA OF A CIRCLE WORD PROBLEMS 1A

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

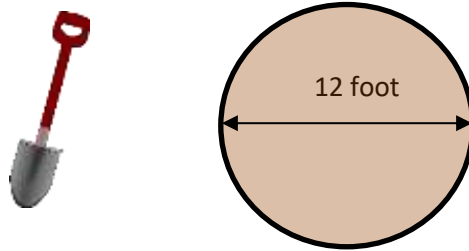
Working out

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



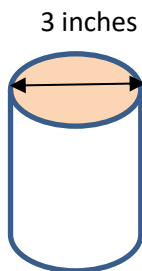
Area of the pond is _____ square yards.

- 2) Captain digs a 12-foot 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 3 inches.
What is the area of the top of the tin?



Area of the top of the tin is _____ .

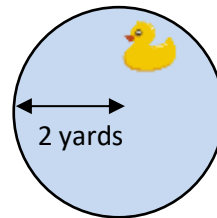


AREA OF A CIRCLE WORD PROBLEMS 1A ANSWERS

Working out

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

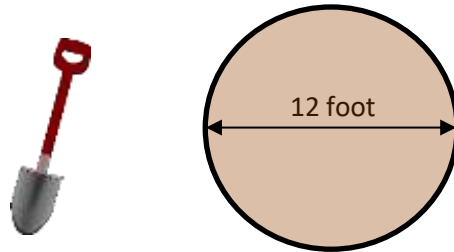
$$\begin{aligned} \text{Area} &= \pi r^2 = \pi \times 2^2 \\ &= \pi \times 4 = 12.6 \text{ square} \\ &\text{yards} \end{aligned}$$



Area of the pond is **12.6 square yards**.

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

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

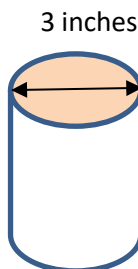


$$\begin{aligned} \text{Area} &= \pi r^2 = \pi \times 6^2 = \\ &36\pi = 113.1 \text{ square} \\ &\text{feet} \end{aligned}$$

Area of the hole is **113.1 square feet**.

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

$$\begin{aligned} \text{Radius of top of tin} \\ &= 3 \div 2 = 1.5 \text{ inches} \end{aligned}$$



$$\begin{aligned} \text{Area} &= \pi r^2 = \pi \times 1.5^2 = \\ &2.25 \times \pi = 7.1 \text{ square} \\ &\text{inches} \end{aligned}$$

Area of the top of the tin is **7.1 square inches**.