



THIRD SPACE
LEARNING

GCSE Exam Questions

Area of a Circle | Geometry &
Measure

GCSE Exam Questions: Area of a circle

- 1) A circle has a radius of 5cm . Work out the area of the circle.
Circle the correct answer.

(1 mark)

- 2) The radius of a circle is 4.5cm . Work out the area of the circle.
Give your answer correct to 3 significant figures.

(2 marks)

- 3) The diameter of a circle is 15cm . Work out the area of the circle.
Leave your answer in terms of π .

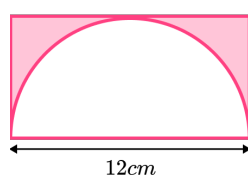
(3 marks)

GCSE Exam Questions: Area of a circle

- 4) The area of a circle is 160cm^2 . Calculate the radius of the circle.
Give your answer correct to 3 significant figures.

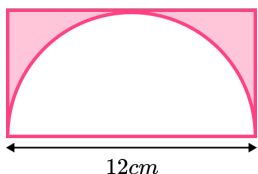
(3 marks)

- 5) The diagram shows a semi-circle within a rectangle. Calculate the shaded area.
Give your answer correct to 3 significant figures.



(4 marks)

GCSE Exam Questions: Area of a circle Answers

	Question	Answer	Marks
1)	A circle has a radius of 5 cm . Work out the area of the circle. Circle the correct answer. $5\pi\text{ cm}^2$ $10\pi\text{ cm}^2$ $15\pi\text{ cm}^2$ $25\pi\text{ cm}^2$	$25\pi\text{ cm}^2$	(1)
2)	The radius of a circle is 4.5 cm . Work out the area of the circle. Give your answer correct to 3 significant figures.	$\pi \times 4.5^2$ 63.6 cm^2	(1) (1)
3)	The diameter of a circle is 15 cm . Work out the area of the circle. Leave your answer in terms of π .	Radius = 7.5 cm $\pi \times 7.5^2$ $\frac{225}{4}\pi$ or 56.25π	(1) (1) (1)
4)	The area of a circle is 160 cm^2 . Calculate the radius of the circle. Give your answer correct to 3 significant figures.	$\pi r^2 = 160$ $r^2 = 50.929\dots$ $r = \sqrt{50.929\dots} = 7.136\dots$ 7.14 cm	(1) (1) (1) (1)
5)	The diagram shows a semi-circle within a rectangle.  Calculate the shaded area. Give your answer correct to 3 significant figures.	Radius = 6 cm $\pi \times 6^2 = 18\pi$ $12 \times 6 - "18\pi"$ 15.2 cm^2	(1) (1) (1) (1)

Where to go next?

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