ENGLAND GCSE MATHS OCR FOUNDATION · UNIT 10 · 25 QUESTIONS

Geometry, Measurement, Area, Volume and Circles — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **A cup of coffee fills a cylindrical cup with radius 5 cm and height 8 cm. The volume of the coffee is, to one decimal place, about**

- **A** 1256.6 cm³
- **B** 78.5 cm³
- **C** 125.7 cm³
- **D** 628.3 cm³

Understand It with Pulse | Flag a mistake

2 **A cardboard box is 4 cm long, 4 cm wide and 2 cm high. Its volume is**

- A 16 cm^3
- B 18 cm^3
- C 36 cm^3
- D 32 cm^3

Understand It with Pulse | Flag a mistake

3 **A swimming pool is 25 m long, 12 m wide and 3 m deep. Its volume is**

- A 936 m^3
- B 900 m^3
- C 1000 m^3
- D 300 m^3

Understand It with Pulse | Flag a mistake

4 **A roundabout has a radius of 5 m. Its area, to one decimal place, is about**

- **A** 31.4 m²
- **B** 78.5 m²
- **C** 15.7 m²
- **D** 157.1 m²

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5 **A Ferris wheel has a diameter of 28 m. Its circumference, to one decimal place, is about**

- **A** 88 m
- **B** 175.9 m
- **C** 44 m
- **D** 94.2 m

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6 **A chocolate cake is a cylinder with radius 10 cm and height 6 cm. Its volume, to one decimal place, is about**

- **A** 314.2 cm^3
- **B** 3769.9 cm^3
- **C** 1885 cm^3
- **D** 188.5 cm^3

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7 **A prism has a cross-section of area 24 cm^2 and length 10 cm. Its volume is**

- **A** 34 cm^3
- **B** 240 cm^3
- **C** 120 cm^3
- **D** 264 cm^3

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8 **A trapezium has parallel sides of 8 cm and 13 cm, and the distance between them is 4 cm. Its area is**

- A 46 cm²
- B 84 cm²
- C 104 cm²
- D 42 cm²

Understand It with Pulse | Flag a mistake

9 **A cylinder has radius 4 cm and height 12 cm. Its volume, to one decimal place, is about**

- A 603.2 cm³
- B 50.3 cm³
- C 150.8 cm³
- D 301.6 cm³

Understand It with Pulse | Flag a mistake

10 **A cuboid is 6 cm by 5 cm by 4 cm. Its total surface area is**

- A 60 cm²
- B 120 cm²
- C 148 cm²
- D 74 cm²

Understand It with Pulse | Flag a mistake

11 **The radius of a circle is 6 cm. Its area, to one decimal place, is about**

- A 18.8 cm²
- B 113.1 cm²
- C 37.7 cm²
- D 226.2 cm²

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12 **The radius of a circle is 7 cm. Its circumference, to one decimal place, is about**

A 153.9 cm

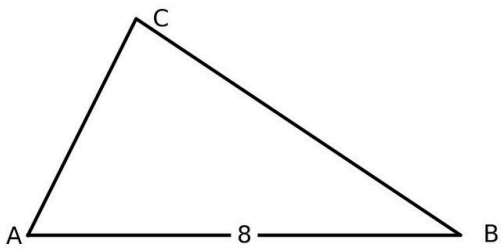
B 22 cm

C 50.3 cm

D 44 cm

Understand It with Pulse | Flag a mistake

13 **A triangle has base 8 cm and height 4 cm. Its area is**



- **A** 24 cm²
- **B** 16 cm²
- **C** 32 cm²
- **D** 12 cm²

Understand It with Pulse | Flag a mistake

14 **A rectangle is 10 cm long and 10 cm wide. Its perimeter is**

- A 20 cm
- B 40 cm
- C 100 cm
- D 42 cm

Understand It with Pulse | Flag a mistake

15 **A prism has a cross-section of area 12 cm² and length 10 cm. Its volume is**

- A 60 cm³
- B 120 cm³
- C 22 cm³
- D 132 cm³

Understand It with Pulse | Flag a mistake

16 **A trapezium has parallel sides of 8 cm and 10 cm, and the distance between them is 6 cm. Its area is**

- A 108 cm²
- B 54 cm²
- C 60 cm²
- D 80 cm²

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17 **A cylinder has radius 3 cm and height 6 cm. Its volume, to one decimal place, is about**

- A 169.6 cm³
- B 28.3 cm³
- C 56.5 cm³
- D 113.1 cm³

Understand It with Pulse | Flag a mistake

18 **The radius of a circle is 10 cm. Its area, to one decimal place, is about**

- **A** 628.3 cm²
- **B** 31.4 cm²
- **C** 62.8 cm²
- **D** 314.2 cm²

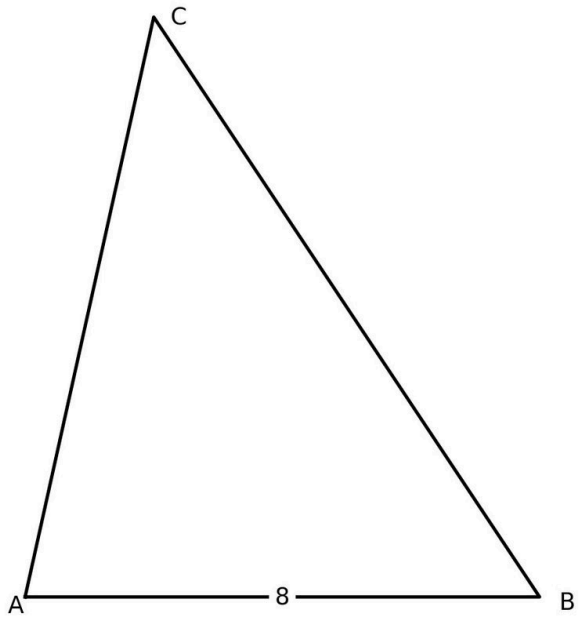
Understand It with Pulse | Flag a mistake

19 **The radius of a circle is 8 cm. Its circumference, to one decimal place, is about**

- **A** 56.5 cm
- **B** 25.1 cm
- **C** 50.3 cm
- **D** 201.1 cm

Understand It with Pulse | Flag a mistake

20 **A triangle has base 8 cm and height 9 cm. Its area is**



A 72 cm²

B 36 cm²

C 44 cm²

D 17 cm²

Understand It with Pulse | Flag a mistake

21 **A rectangle is 9 cm long and 9 cm wide. Its perimeter is**

- A 36 cm
- B 18 cm
- C 38 cm
- D 81 cm

Understand It with Pulse | Flag a mistake

22 **A prism has a cross-section of area 20 cm² and length 6 cm. Its volume is**

- A 26 cm³
- B 140 cm³
- C 120 cm³
- D 60 cm³

Understand It with Pulse | Flag a mistake

23 **A trapezium has parallel sides of 4 cm and 7 cm, and the distance between them is 6 cm. Its area is**

- A 39 cm²
- B 28 cm²
- C 66 cm²
- D 33 cm²

Understand It with Pulse | Flag a mistake

24 **A cuboid is 5 cm by 3 cm by 3 cm. Its total surface area is**

- A 39 cm²
- B 78 cm²
- C 30 cm²
- D 45 cm²

Understand It with Pulse | Flag a mistake

25 **The radius of a circle is 4 cm. Its area, to one decimal place, is about**

- **A** 12.6 cm²
- **B** 25.1 cm²
- **C** 50.3 cm²
- **D** 100.5 cm²

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	D	**10.**	C	**19.**	C
2.	D	**11.**	B	**20.**	B
3.	B	**12.**	D	**21.**	A
4.	B	**13.**	B	**22.**	C
5.	A	**14.**	B	**23.**	D
6.	C	**15.**	B	**24.**	B
7.	B	**16.**	B	**25.**	C
8.	D	**17.**	A		
9.	A	**18.**	D		

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