CALIFORNIA GEOMETRY · UNIT 4 · 25 QUESTIONS

Geometric Measurement and Modeling — 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 rectangle has length 9 and width 4. Its area is**

- A 26
- B 45
- C 36
- D 13

Understand It with Pulse | Flag a mistake

2 **A triangle has base 16 and height 7. Its area is**

- A 56
- B 112
- C 23
- D 46

Understand It with Pulse | Flag a mistake

3 **A parallelogram has base 12 and height 5. Its area is**

- A 120
- B 17
- C 60
- D 34

Understand It with Pulse | Flag a mistake

4 **A trapezoid has bases 10 and 18 and height 6. Its area is**

- **A** 168
- **B** 28
- **C** 84
- **D** 108

Understand It with Pulse | Flag a mistake

5 **A regular hexagon with side 2 can be split into 6 equilateral triangles. Each has area $\sqrt{3}$. The hexagon area is**

- **A** $12\sqrt{3}$
- **B** $6\sqrt{3}$
- **C** $2\sqrt{3}$
- **D** $\sqrt{3}$

Understand It with Pulse | Flag a mistake

6 **A rectangular prism has dimensions 3, 4, and 5. Its volume is**

- A 60
- B 47
- C 94
- D 30

Understand It with Pulse | Flag a mistake

7 **A cylinder has radius 3 and height 5. Its volume is**

- A 90π
- B 45π
- C 15π
- D 30π

Understand It with Pulse | Flag a mistake

8 **A cone has radius 4 and height 9. Its volume is**

- A 144π
- B 48π
- C 36π
- D 16π

Understand It with Pulse | Flag a mistake

9 **A sphere has radius 3. Its volume is**

- A 108π
- B 27π
- C 12π
- D 36π

Understand It with Pulse | Flag a mistake

10 **A sphere has radius 2. Its surface area is**

- A 4π
- B 32π
- C 16π
- D 8π

Understand It with Pulse | Flag a mistake

11 **A cube has side length 4. Its surface area is**

- A 24
- B 64
- C 96
- D 48

Understand It with Pulse | Flag a mistake

12 **A cylinder has radius 2 and height 7. Its lateral area is**

- A 56π
- B 14π
- C 28π
- D 4π

Understand It with Pulse | Flag a mistake

13 **Two similar solids have linear scale factor 1:2. The smaller has volume 30. The larger volume is**

- A 90
- B 240
- C 120
- D 60

Understand It with Pulse | Flag a mistake

14 **Two similar figures have linear scale factor 2:3. The smaller has area 36. The larger area is**

- A 108
- B 54
- C 81
- D 24

Understand It with Pulse | Flag a mistake

15 **A model is built at a scale of 1:20. A real length of 100 cm is modeled as**

- A 5
- B 20
- C 50
- D 2000

Understand It with Pulse | Flag a mistake

16 **Density equals mass divided by volume. A block has mass 240 and volume 80. Its density is**

A 3

B 160

C 320

D 0

Understand It with Pulse | Flag a mistake

17 **A cross section of a cylinder parallel to its base is a**

A Circle

B Triangle

C Rectangle

D Square always

Understand It with Pulse | Flag a mistake

18 **A cross section of a rectangular prism parallel to a face is a**

- A Triangle
- B Circle
- C Rectangle
- D Sphere

Understand It with Pulse | Flag a mistake

19 **Rotating a rectangle about one side generates a**

- A Cone
- B Cube
- C Sphere
- D Cylinder

Understand It with Pulse | Flag a mistake

20 **Rotating a right triangle about one leg generates a**

- A Cone
- B Cylinder
- C Sphere
- D Prism

Understand It with Pulse | Flag a mistake

21 **A pyramid has base area 24 and height 9. Its volume is**

- A 108
- B 33
- C 72
- D 216

Understand It with Pulse | Flag a mistake

22 **The area of a circle with radius 10 is**

A 10π

B 100π

C 200π

D 20π

Understand It with Pulse | Flag a mistake

23 **A composite figure is made of a 5 by 6 rectangle and a triangle with base 5 and height 4. The total area is**

A 20

B 50

C 40

D 30

Understand It with Pulse | Flag a mistake

24 **A cube has side length 5. Its volume is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **A rectangular prism has dimensions 2, 6, and 7. Its volume is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. C
2. A
3. C
4. C
5. B
6. A
7. B
8. B
9. D
10. C
11. C
12. C
13. B
14. C
15. A
16. A
17. A
18. C
19. D
20. A
21. C
22. B
23. C
24. 125
25. 84

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