

# Geometric Formulas Worksheet Answer Key

## *You've Fallen Right into Our Trapezoid*

1. Find the volume of a cube with a radius of 4 cm.

$$\frac{4}{3}\pi(4)^3 = 267.9 \text{ cm}^3$$

2. Find the circumference of a circle with a diameter of 3 cm.

$$\pi(3) = 9.42 \text{ cm}$$

3. Find the area of a circle with a radius of 8 in.

$$\pi(8)^2 = 201.06 \text{ in}^2$$

4. Find the area of a trapezoid with bases of 8 ft and 10 ft and a height of 4 ft.

$$\frac{1}{2}(8 + 10)(4) = 36 \text{ ft}^2$$

5. Find the area of a rectangle with a length of 15 m and a width of 12 m.

$$15 \times 12 = 150 \text{ m}^2$$

6. Find the area of a triangle with a height of 30 ft and a base of 25 ft.

$$\frac{1}{2}(30)(25) = 325 \text{ ft}^2$$

7. Find the surface area of a cube with a length of 20 mm.

$$6(20)^2 = 2400 \text{ mm}^2$$

8. Find the volume of a rectangular prism with a length of 4cm, a width of 12 cm, and a height of 5 cm.

$$4 \times 12 \times 5 = 240 \text{ cm}^3$$

9. Find the area of a square with a perimeter of 20 cm.

$$\text{Length} = \frac{20}{4} = 5 \text{ cm, area} = 25 \text{ cm}^2$$

10. Find the diameter of a circle with an area of  $36\pi \text{ cm}^2$ .

$$36\pi = \pi(\text{radius})^2, \text{ diameter} = 12 \text{ cm}$$

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