

# Geometric Measurement Worksheet 4

Round all answers to the nearest tenth.

1. Given a sphere with a volume of  $2000 \text{ cm}^3$ , find the area of the perpendicular cross section right through its center.
2. Given a cylinder with radius 7 in and height 10 in, find the area of a cross section that is parallel to its base.
3. Given a cone with a radius of 6 ft and a height of 12 ft, find the area of the triangle formed by a perpendicular cross section down through the cone's center.
4. Given a cube with volume of  $27,000 \text{ cm}^3$ , find the area of a cross section parallel to its base.
5. Given a cylinder with height 60 mm and radius 20 mm, find the area of the rectangle formed by the perpendicular cross-section right down the cylinder's center.
6. A circle has a radius of 15 cm. What is the volume of the sphere made by rotating this circle?
7. A rectangle has a length of 3 m and a height of 5 m. What is the volume of the cylinder made by rotating this rectangle?
8. An isosceles triangle has base of 20 ft and an altitude of 30 ft. What is the volume of the cone made by rotating this triangle?
9. A square with area of  $100 \text{ cm}^2$  is rotated to form a cylinder. What is the volume of the cylinder?
10. If an equilateral triangle with perimeter 24 cm is rotated, find the volume of the cone that is formed.