

Name _____

Geometry Word Problems



1. Ava is designing a circular garden for her backyard. The garden will have a fountain at the center in the shape of a cone, with a height of 6 feet and a volume of 100π cubic feet. If the remaining area of the garden is 500π square feet, what is the radius of the garden?
2. Liam is constructing a triangular prism-shaped fish tank for his pet fish. If the volume of the tank is 800 cubic feet and the base of the triangle is 4 times the height, what are the dimensions of the tank?
3. Harper is wrapping a ribbon around the edge of her cylindrical gift. If the volume of the cylinder is 1000π cubic inches and the height is 20 inches, what is the total surface area of the cylinder?
4. Owen is building a fence around his irregularly shaped garden. If the lengths of the sides are 24 meters, 18 meters, 15 meters, and 12 meters, and one of the angles between the sides is 90 degrees, what is the perimeter of the garden?
5. Mia is cutting out triangles for a school project. If the lengths of the three sides are 24 inches, 25 inches, and 26 inches, what type of triangle is it?
6. Noah is wrapping a ribbon around the edge of his cuboid-shaped gift box. If the volume of the box is 1000 cubic inches and the length is twice the width and the height is half the width, what are the dimensions of the box?
7. Emma is planting flowers in her circular garden. If the circumference of the garden is 150π feet and the width of the pathway surrounding the garden is 5 feet, what is the area of the pathway?
8. Ethan is building a triangular roof for his doghouse. If the area of the roof is 120 square feet and the lengths of the three sides are in the ratio 7:8:9, what type of triangle is it?
9. Olivia is drawing a regular hexagon on a piece of paper. If the area of the hexagon is $300\sqrt{3}$ square centimeters, what is the length of each side?
10. Jack is drawing a regular octagon for his art project. If the area of the octagon is $200\sqrt{2}$ square inches and the length of each side is x , what is the value of x ?

