Determining Lengths from the Volume (Part 1)

For each figure, use the volume formula and given information to determine the desired value.
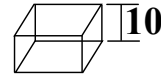
1. A square pyramid has a volume of 6 cubic centimeters and a height of 2 centimeters. What is the approximate length of each side of the base to the nearest whole number?	2. The volume of a cone is 103.62 cubic centimeters and the height is 2 centimeters. What is the approximate length of the radius of the cone to the nearest whole number?	3. A square prism has a volume of 820 cubic centimeters and a height of 10 centimeters. What is the approximate length of each side of the base to the nearest whole number?
4. The volume of a cone is 85 cubic centimeters and the radius is 3 centimeters. What is the approximate length of the height of the cone to the nearest whole number?	5. The volume of a cylinder is 632 cubic centimeters and the height is 8 centimeters. What is the approximate length of the radius of the cylinder to the nearest whole number?	6. The volume of a sphere is 520 cubic centimeters. What is the approximate length of the radius to the nearest whole number?

7. A prism has a volume of 58 cubic centimeters and a base area of 6 square centimeters. What is the approximate height of the figure to the nearest whole number? 6	8. The volume of a cylinder is 100 cubic centimeters and the radius is 4 centimeters. What is the approximate length of the height of the cylinder to the nearest whole number? 4	9. The volume of a cylinder is 803.84 cubic centimeters and the radius is 8 centimeters. What is the approximate length of the height of the cylinder to the nearest whole number? 8
10. The volume of a cylinder is 84 cubic centimeters and the height is 7 centimeters. What is the approximate length of the radius of the cylinder to the nearest whole number? 7	11. A square pyramid has a volume of 7 cubic centimeters and a height of 5 centimeters. What is the approximate length of each side of the base to the nearest whole number? 5	12. The volume of a sphere is 908 cubic centimeters. What is the approximate length of the radius to the nearest whole number?
13. The volume of a cone is 350 cubic centimeters and the height is 4 centimeters. What is the approximate length of the radius of the cone to the nearest whole number? 4	14. A pyramid has a volume of 11 cubic centimeters and a base area of 4 square centimeters. What is the approximate height of the figure to the nearest whole number? 4	15. The volume of a cone is 98 cubic centimeters and the height is 10 centimeters. What is the approximate length of the radius of the cone to the nearest whole number? 10