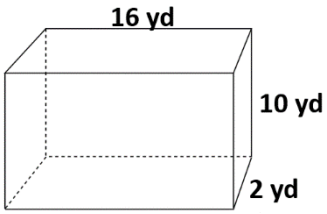
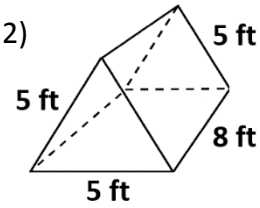
Name _____ Unit 8 Quiz Study Guide

Directions: Find the volume of each shape with the given information.

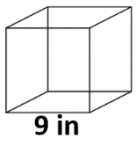
1)



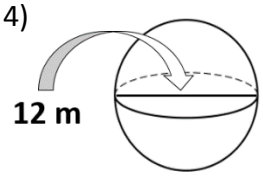
2)



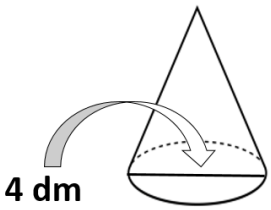
3) (Cube)



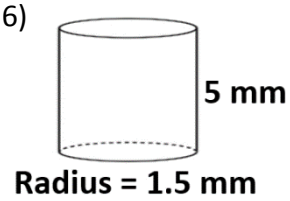
4)



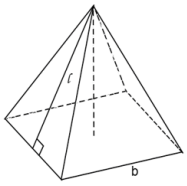
5) The height is double the radius.



6)

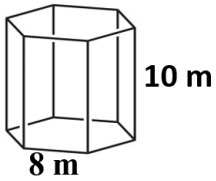


7) Regular Pyramid

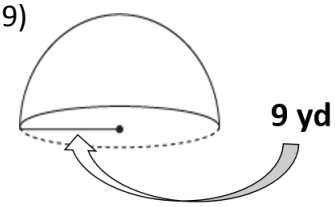


l = 13 ft
b = 24 ft

8) Regular Prism



9)



10) The volume of a ball is 972π cm^3. What is the circumference of the great circle of this ball to the nearest tenth?

11) The volume of the cylinder is 552.9 in^3. The diameter of this cylinder is 8 in. If the volume of the water is 301.6 in^3, what is the distance between the top of the water line to the top of the cylinder?

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12) The circumference of the Earth is estimated to be about 7920π miles. The diameter of the moon is estimated to be 2160 miles. How does the volume of the Earth compare to the volume of the moon?

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13) A 4 in tall rectangular brick patio has an area of 120 ft^2. If the density of brick is 130 pounds per cubic foot, how many pounds is the weight of the patio?

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14) A regular pentagonal prism has an apothem of 3 inches and a height of 5 inches. The apothem is increased by 3 feet and the height is doubled. What is the volume of the new prism?

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15) Name the solids in order from the smallest volume to the largest volume.