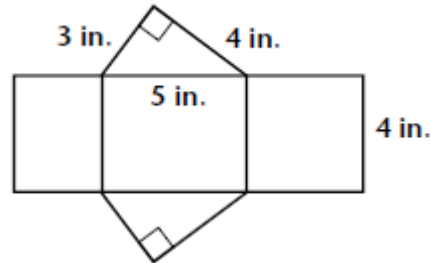


SHOW ALL WORKING ON A SEPARATE PAPER!!!

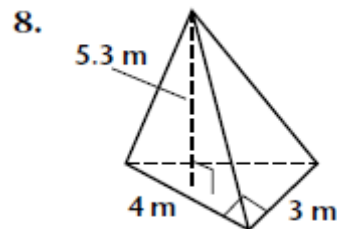
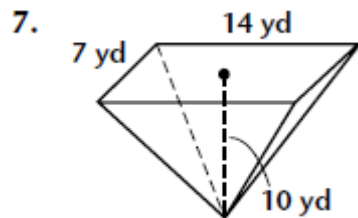
1. Find the area of a circle with a radius of 8 cm. _____
2. Find the volume of a cylinder with a radius of 6 in. and a height of 8 in.
3. Find the volume of a right cone with a radius of 4 cm and a height of 6 cm.

Consider the net diagram at right for questions 4 – 6.

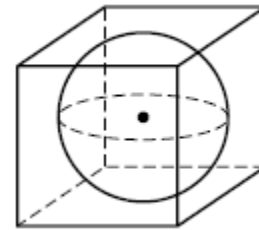


4. What shape does the net diagram make?
5. Find the surface area of the figure.
6. Find the volume.

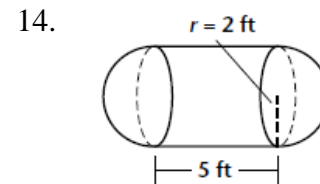
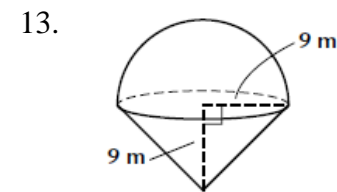
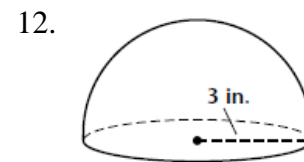
Find the surface area and volume of each 3-dimensional shape. What are these called?



9. A beach ball has a diameter of 15 in. How much vinyl is needed to make the ball?
10. A ball with a diameter of 4 in. is placed in a cylinder filled to the top with water. The cylinder is 5 in. in diameter and 10 in. tall. How much water is forced out of the cylinder?
11. The sphere is inscribed in the cube. The volume of the cube is 4096 cubic feet. Find the volume of the sphere.



Find the exact volume of each space figure.



15. A spherical scoop of ice cream has radius 1.25 inches. The scoop is placed on top of a cone with radius 1 inch and height 5 inches. Is the cone large enough to hold all the ice cream if it melts? Explain.