

Name \_\_\_\_\_

Math 7 Honors

Date \_\_\_\_\_

**HW: Volume Practice**

Rectangular Prism

$$V = lwh$$

Cylinder

$$V = \pi r^2 \cdot h$$

Cone

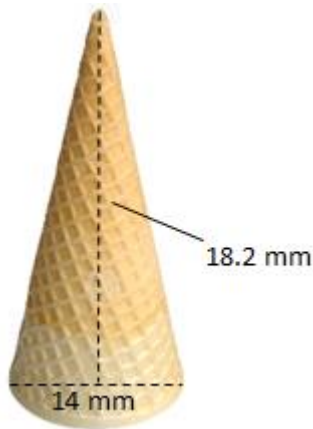
$$V = \frac{1}{3} \pi r^2 \cdot h$$

Sphere

$$V = \frac{4}{3} \pi r^3$$

Directions: Use the appropriate formula to solve each of the questions below. Show your work.

1. Bella purchased an ice cream cone with the dimensions shown below. Determine the volume of the cone *to the nearest tenth*.



2. The dimensions of a Fed Ex shipping box are shown below. Determine the volume of the box.



3. A case of Campbell's chicken soup contains 6 cans. Determine the total amount of soup in each case. *Leave your answer in terms of  $\pi$ .*



4. The radius of a baseball is approximately 3.8 cm. Find the volume of the baseball *to the nearest hundredth*.

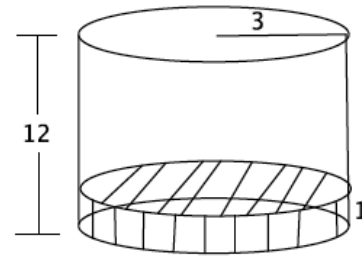


5. Anissa buys a spherical snow globe with a diameter of 10 cm. What is the total volume of the snow globe *to the nearest tenth*?

*Show your work.*

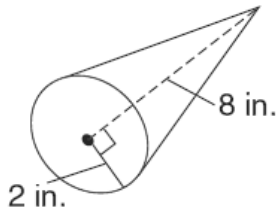


6. Matthew is filling the cylindrical tank shown below. If the tank already contained 1-foot of water when he started, how much more water will he need to finish filling the tank? *Leave your answer in terms of  $\pi$ .*

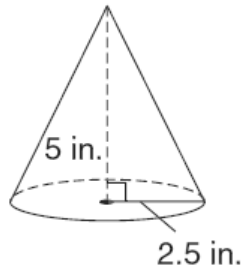


7. Jacob and Marc are creating sand art projects using the cone shaped jars shown below.

*Jacob's Project*

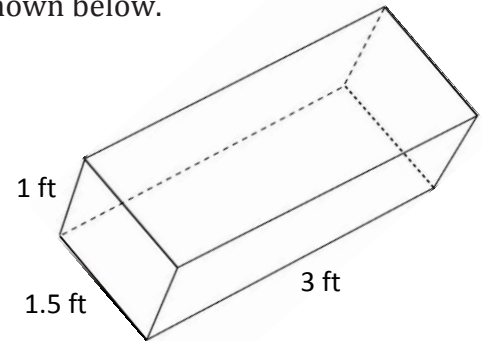


*Marc's Project*



If they fill their projects completely, which cone will hold more sand? *Show work to support your answer.*

8. Violet is helping her aunt fill a rectangular flower box with soil. The dimensions of the prism are shown below.



If each cubic foot of soil cost \$2.80, what will be the cost to fill the flower box completely? *Show your work.*