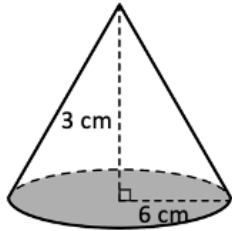


# SOLIDS REVIEW

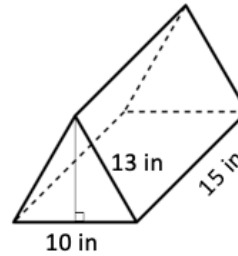
**Topic #1:** I can identify the type of solid and use the appropriate formula to find the volume.

**Directions:** For each of the regular solid figures below, name the type of solid and calculate the volume. Show all your work and leave your answer in **exact form**.

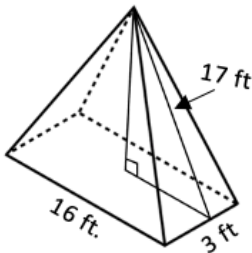
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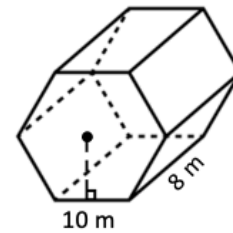
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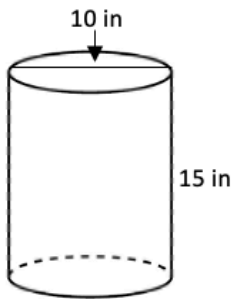
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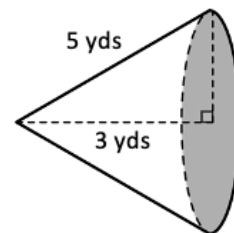
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5.



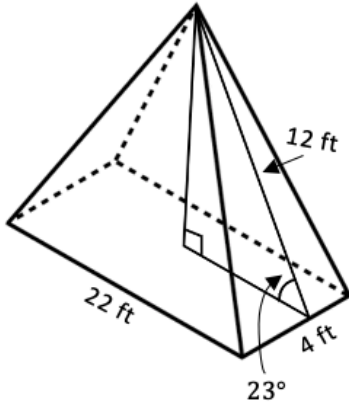
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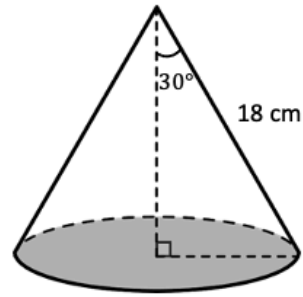
**Topic #2:** I can use Pythagorean theorem, trigonometry or special right triangles to find missing side lengths of solid figures.

**Directions:** Calculate the volume of each solids below. Show all your work and round your answer to the nearest tenth.

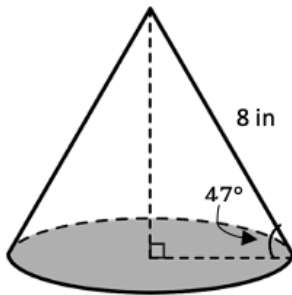
1.



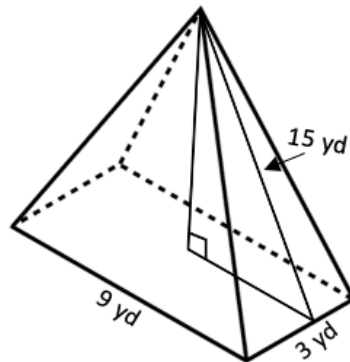
2.



3.



4.



**Topic #3:** I can solve real world problems involving solids figures.

**Directions:** Read each word problem carefully. Draw a diagram, show all your work and state your final answer in a sentence with appropriate units.

1. A scoop of ice cream is in the shape of a perfect sphere and it sits on top of a cone. The diameter of the sphere equals the diameter of the base of the cone, which is 5 cm. How tall must the cone be so that if the ice cream melts, it will all fit into the cone?

2. Pepsi-Cola wants to make a cylindrical can that is 5 inches tall and has a volume of  $20\pi \text{ in}^3$ . What does the radius of the can need to be?

3. A rectangular glass tank needs to hold 20 gallons of water. 1 gallon =  $231 \text{ in}^3$ . If the base is 48 inches by 24 inches, how tall does the tank need to be?

4. Water is pouring into a cone shaped reservoir at a rate of 3 cubic meters per minute. The slant height of the cone is 25 meters and the radius is 15 meters. Find to the nearest minute, how long it will take to fill the reservoir (from start to finish).