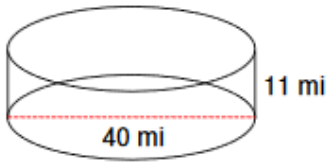
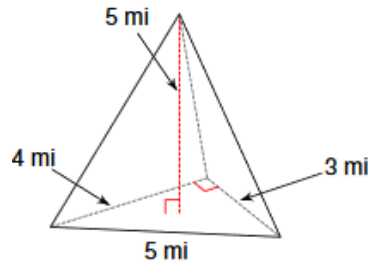


Volume and Composites

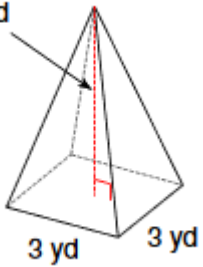
1.



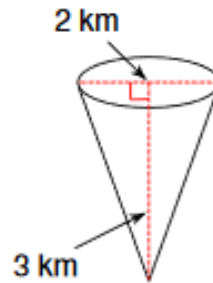
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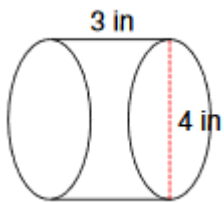
5 yd



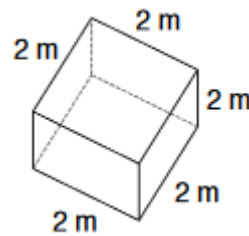
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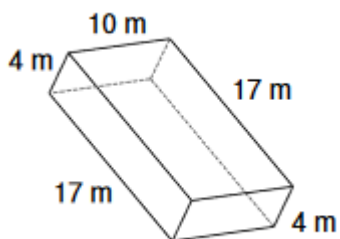
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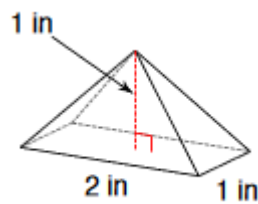
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7.

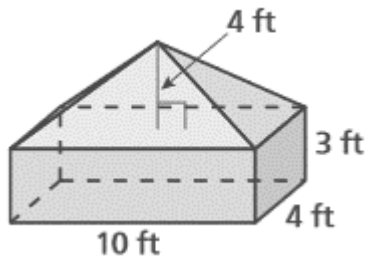


8.

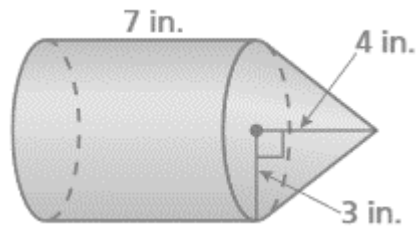


Find the volume of the composite solid

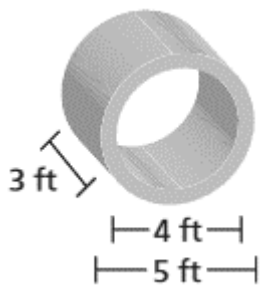
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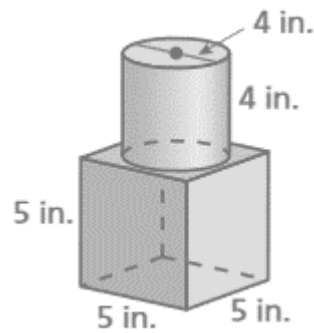
10.



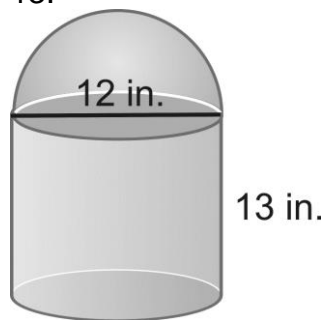
11.



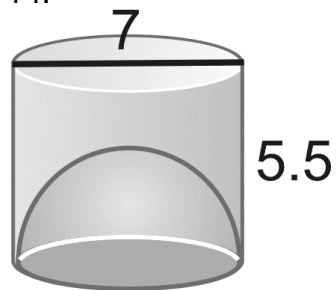
12.



13.



14.



Volume Word Problems

1. A storage container is a cylinder with a height of 28.2 cm and a radius of 5 cm. How many liters of water will the storage container hold?

$$1 \text{ liter} = 1000 \text{ cm}^3$$

2. A fish tank at the aquarium has a radius of 20 meters and a height of 10 meters. How many gallons of water will the tank hold? There are 264.172 gallons in 1 cubic meters?

2. The volume of a scoop of ice cream is 15 cubic inches. What is the diameter of the scoop of ice cream?

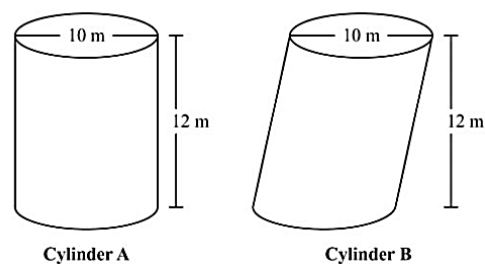
3. An ice cream cone has a radius of 1 inch and a height of 5 inches. How much ice cream will fill the cone?

5. A spherical scoop of ice cream is 2.5 inches in diameter and sits atop a cone that has the same diameter. The height of the cone is 6 inches.

- What is the volume of the ice cream scoop?
- What is the volume of the cone?
- If the ice cream melts and drips into the cone, will the cone be able to hold all of the melted ice cream? Explain.








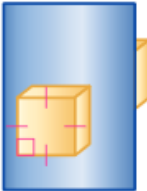
6. A manufacturer is shipping a spherical globe that fits exactly in a box shaped like a cube. The globe is touching all six sides of the box. If the volume of the box is 343 in^3 , what is the volume of the globe?

7. What is the volume of each cylinder? What do you notice about their volumes?



Cross Sections

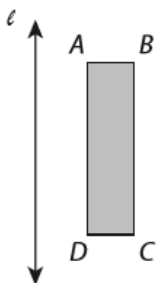
Describe the shape resulting from each cross section.

<p>1.</p> 	<p>2.</p> 	<p>3.</p> 	<p>4.</p> 
<p>5.</p> 	<p>6.</p> 	<p>7.</p> 	<p>8.</p> 

10. One cross section of a geometric solid is a circle, and another cross section of the same solid is a rectangle. What is the geometric solid?

11. Find the maximum radius of a cross section of a spherical gumball that has a volume of 32 millimeters.

12. What is the best description of the solid that results from rotating rectangle ABCD one full revolution around line l ?



13. A right triangle is rotated 360° about its longer leg, AC, as shown. Describe the solid figure produced by this rotation.

