Volume - IM2

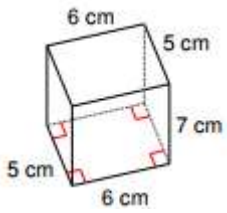
Name_____

Volume of Flat Solids (prisms & cylinders)	Volume of Pointy Solids (pyramids & cones)	Volume of Spheres
$V = B \cdot h$	$V = \frac{1}{3} \cdot B \cdot h$	$V = \frac{4}{3} \cdot \pi \cdot r^2$

Where *B* = area of the base, *h* = height measured perpendicular to the base, and r is the radius.

Find the volume of each solid. Write answers using π or simplest radical form (unless decimals are given in the problem).

1)



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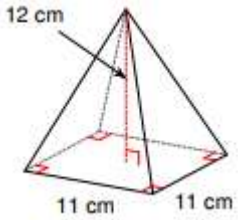

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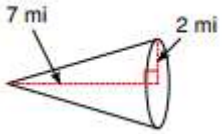

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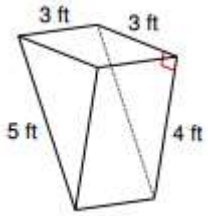
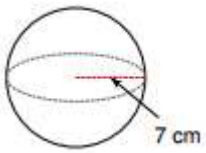


Hint: the base is a triangle and the height is the distance between the two triangles.

5)



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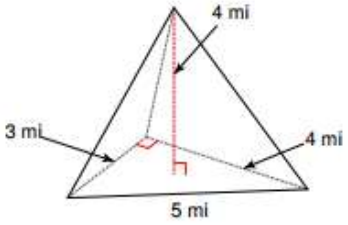

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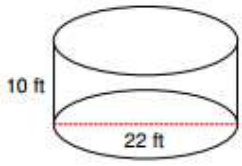

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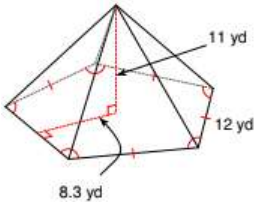
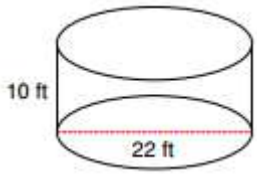


Hint: The area of the base (B) is 49.8. That's a formula we haven't learned…yet.

9)



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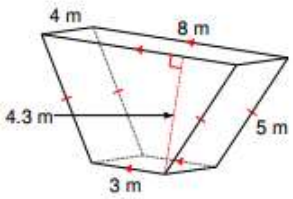

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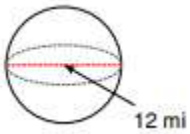

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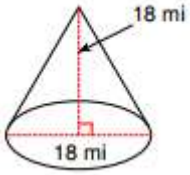

13) Find the radius of a cylinder with a volume of $108\pi\ ft^3$ and a height of $12\ ft$.

14) Find the height of a cylinder with a volume of $100\ cm^3$ and a radius of $2\ cm$.

15) Sketch and label a cube and a square-based pyramid that have the same volume.

16) Sketch and label a cone that has the same volume as a sphere with radius 4. Round to the nearest tenth if needed.