Volume - IM2

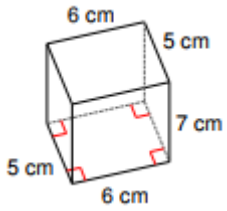
Name_____

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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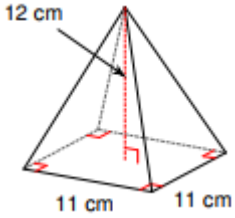

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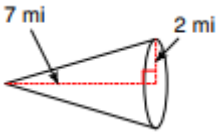

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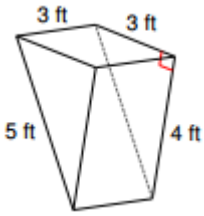

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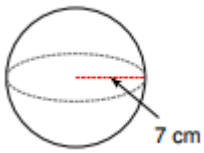

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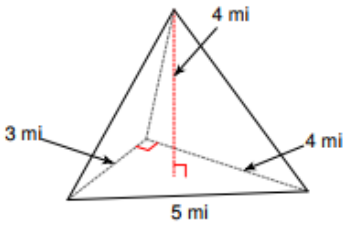

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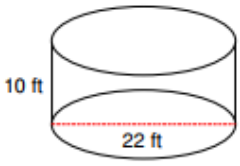

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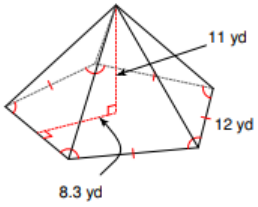

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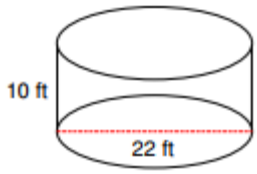

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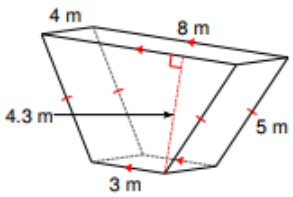

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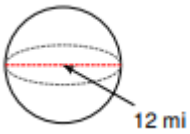

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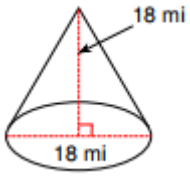

13) Find the radius of a cylinder with a volume of $108\pi\ ft^3$ and a height of $12\ ft$.

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

15) A sphere and a cube have the same surface area. Which has the greater volume? Show evidence to support your answer.

16) A *tetrahedron* is a triangular pyramid where all the edges and angles are congruent. What is the volume of a tetrahedron with edges length 8?