

NAME: _____

DATE: _____

SURFACE AREA & VOLUME

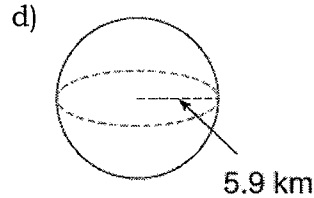
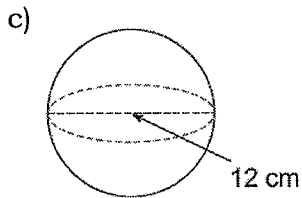
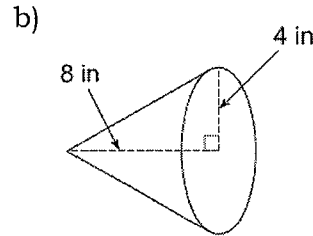
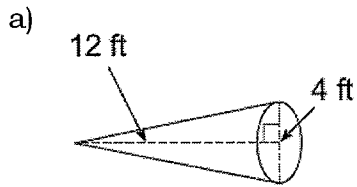
PERIOD: _____

How Do You Find Volume of Cones and Spheres?

(Topic #7)

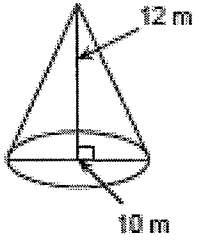
Volume of a Cone Formula	Volume of a Sphere Formula

EXAMPLE 1: Find the volume of the figures below. Round to the nearest tenth.

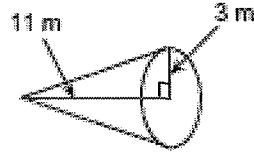


PRACTICE: Find the volume of the following figures, Use 3.14 for π .

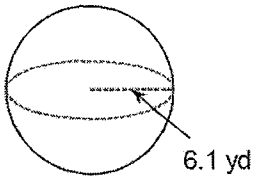
1)



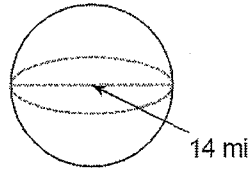
2)



3)



4)



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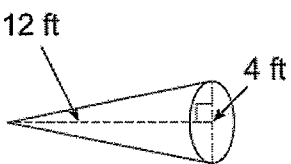
PERIOD: _____

How Do You Find Volume of Cones and Spheres?

(Topic #7)

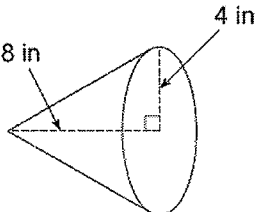
Volume of a Cone Formula	Volume of a Sphere Formula
$V = \frac{1}{3} \pi r^2 h$	$V = \frac{4}{3} \pi r^3$

EXAMPLE 1: Find the volume of the figures below. Round to the nearest tenth.

a)  $d = 4$
 $r = 2$

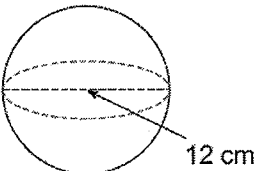
$$V = \frac{1}{3} \pi (2)^2 (12)$$

$$V = 50.3 \text{ ft}^3$$

b)  4 in
 8 in

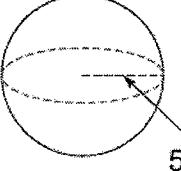
$$V = \frac{1}{3} \pi (4)^2 (8)$$

$$V = 134.0 \text{ in}^3$$

c)  12 cm
 $d = 12$
 $r = 6$

$$V = \frac{4}{3} \pi (6)^3$$

$$V = 904.8 \text{ cm}^3$$

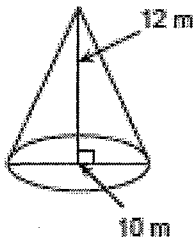
d)  5.9 km

$$V = \frac{4}{3} \pi (5.9)^3$$

$$V = 860.3 \text{ km}^3$$

PRACTICE: Find the volume of the following figures, Use 3.14 for π .

1)



$$d = 10$$

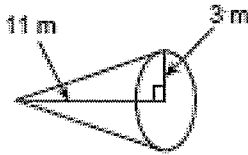
$$r = 5$$

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

$$V = \frac{1}{3} (3.14) (5)^2 (12)$$

$$V = 314 \text{ m}^3$$

2)

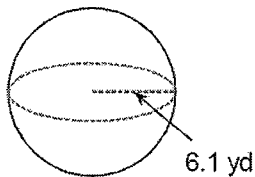


$$V = \frac{1}{3} \pi r^2 h$$

$$V = \frac{1}{3} (3.14) (3)^2 (11)$$

$$V = 103.62 \text{ m}^3$$

3)

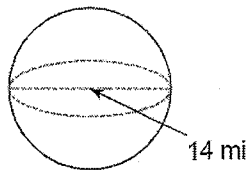


$$V = \frac{4}{3} \pi r^3$$

$$V = \frac{4}{3} (3.14) (6.1)^3$$

$$V = 950.3 \text{ yd}^3$$

4)



$$d = 14$$

$$r = 7$$

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

$$V = \frac{4}{3} (3.14) (7)^3$$

$$V = 1436.0 \text{ mi}^3$$