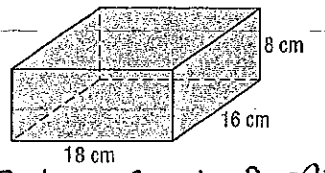
NAME Day 5 HW DATE _____ PERIOD _____

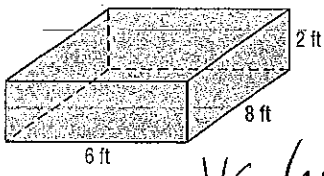
12-4 Skills Practice

Volumes of Prisms and Cylinders

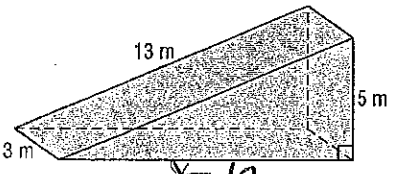
Find the volume of each prism or cylinder. Round to the nearest tenth if necessary.

1. 

$V = BH = 18 \cdot 16 \cdot 8 = 2304 cm^3$

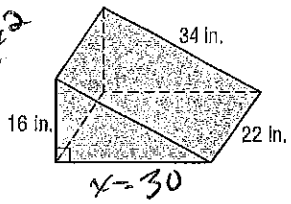
2. 

$V = 6 \cdot 8 \cdot 2 = 96 ft^3$

3. 

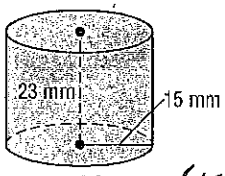
$5^2 + x^2 = 13^2$
$x = 12$

$V = Bh = \frac{1}{2}(18)(5)(3) = 90 m^3$

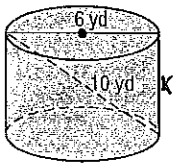
4. 

$16^2 + x^2 = 34^2$
$x = 30$

$V = Bh = \frac{1}{2}(30)(16)(22)$
$= 5280 in^3$

5. 

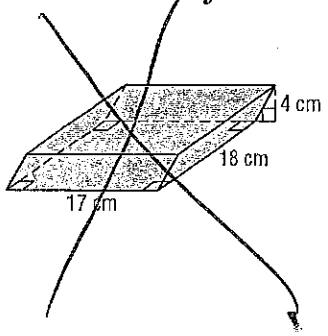
$V = \pi r^2 h = \pi(15)^2(23)$
$= 5175\pi mm^3$

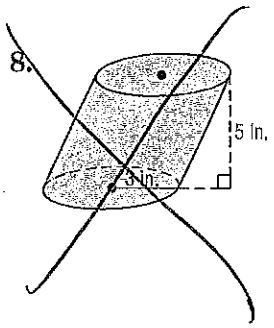
6. 

$V = \pi(3)^2(8) = 72\pi yd^2$

$x^2 + 6^2 = 10^2$
$x = 8$

Find the volume of each oblique prism or cylinder. Round to the nearest tenth if necessary.

7. 

8. 

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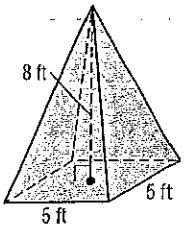
NAME Day 5 HW DATE PERIOD

12-5 Skills Practice

Volumes of Pyramids and Cones

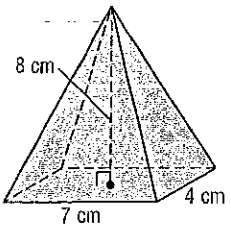
Find the volume of each pyramid or cone. Round to the nearest tenth if necessary.

1.



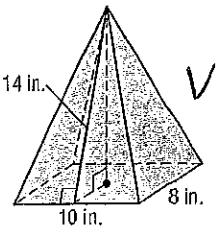
$V = \frac{1}{3}Bh$
$= \frac{1}{3}(25)(8)$
$= 66\frac{2}{3}\text{ ft}^3$

2.



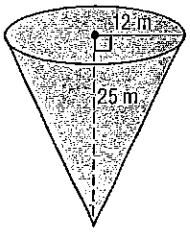
$V = \frac{1}{3}Bh$
$= \frac{1}{3}(7 \cdot 4)(8)$
$= 74\frac{2}{3}\text{ cm}^3$

3.



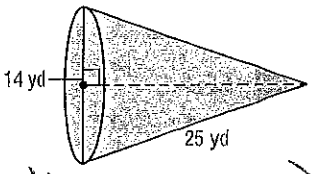
$V = \frac{1}{3}(10 \cdot 8)(14)$
$= 373\frac{1}{3}\text{ in}^3$

4.



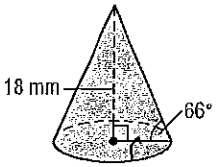
$V = \frac{1}{3}\pi r^2 h$
$= \frac{1}{3}\pi(12)^2(25)$
$= 1200\pi\text{ m}^3$

5.



$V = \frac{1}{3}\pi(7)^2(25)$
$V = 408\frac{1}{3}\pi\text{ yd}^3$

6.

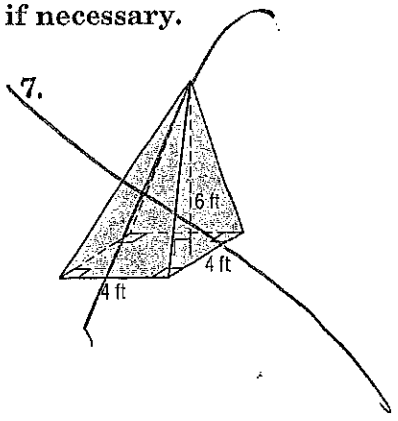


$\tan 66 = \frac{18}{r}$
$r = 18.01$

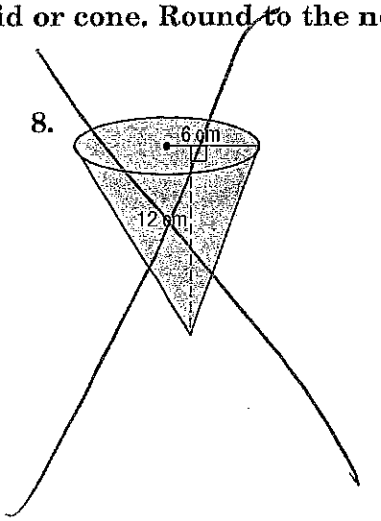
$V = \frac{1}{3}\pi(18.01)18$
$V = 48.08\text{ mm}^3$

Find the volume of each oblique pyramid or cone. Round to the nearest tenth if necessary.

7.



8.



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