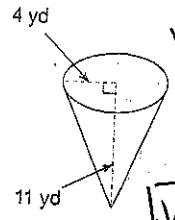
$B \cdot H$ $\frac{1}{3}BH$ $\frac{4}{3}\pi r^3$

Geometry Honors (WKST 9.12) Name Answer Key ID: 1

Volume of Cylinders, Cones and Spheres

Date _____ Period ____

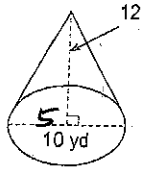
Find the volume of each figure. Round your answers to the nearest tenth, if necessary. Leave your answers in terms of π for answers that contain π.

1) 

$V = \frac{1}{3}B \cdot H$

$V = \frac{16\pi(11)}{3}$

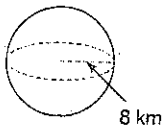
$V = 58.7\pi \text{ yd}^3$

2) 

$\frac{1}{3}BH$

$\frac{1}{3}(25\pi)(12)^4$

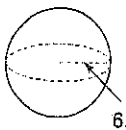
$V = 100\pi \text{ yd}^3$

3) 

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

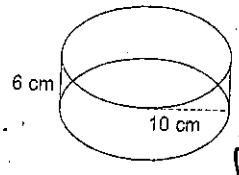
$\frac{4}{3}\pi(8)^3$

$V = 682.7\pi \text{ km}^3$

4) 

$\frac{4}{3}\pi r^3 = \frac{4}{3}\pi(6.3)^3$

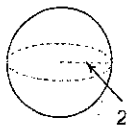
$333.4\pi \text{ mi}^3$

5) 

$V = B \cdot H$

$V = 100\pi(6)$

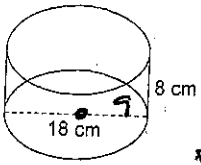
$V = 600\pi \text{ cm}^3$

6) 

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

$\frac{4}{3}\pi(2)^3$

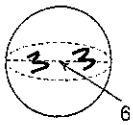
$V = 10.7\pi \text{ km}^3$

7) 

$V = B \cdot H$

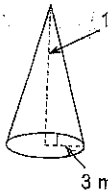
$V = 81\pi(8)$

$V = 648\pi \text{ cm}^3$

8) 

$\frac{4}{3}\pi(3)^3$

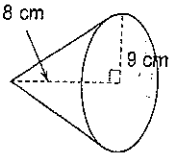
$V = 36\pi \text{ km}^3$

9) 

$V = \frac{1}{3}BH$

$V = \frac{1}{3}(9\pi)(11)^3$

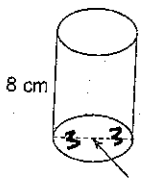
$V = 33\pi \text{ m}^3$

10) 

$V = \frac{1}{3}BH$

$V = \frac{1}{3}(81\pi)(18)^6$

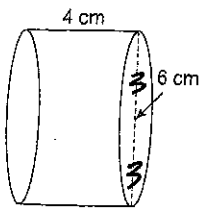
$V = 486\pi \text{ cm}^3$

11) 

$V = BH$

$V = 9\pi(8)$

$V = 72\pi \text{ cm}^3$

12) 

$V = BH$

$V = 9\pi(4)$

$V = 36\pi \text{ cm}^3$

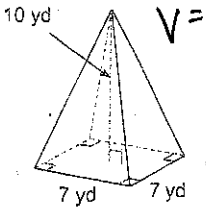
B·H $\frac{1}{3}BH$

Geometry Honors (WKST 9.11) Name Answer key ID: 1

Volume of Prisms and Pyramids

Date _____ Period ____

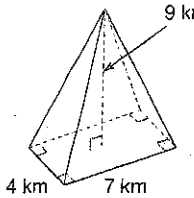
Find the volume of each figure. Round your answers to the nearest tenth, if necessary.

1) 

$V = \frac{1}{3}BH$

$\frac{1}{3}(49)(10)$

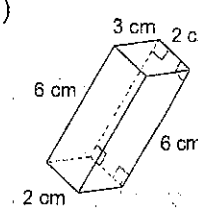
$V = 163.3\ yd^3$

2) 

$V = \frac{1}{3}BH$

$V = \frac{1}{3}(28)(9)$

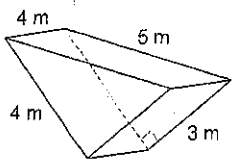
$V = 84\ km^3$

3) 

$V = BH$

$V = 6(6)$

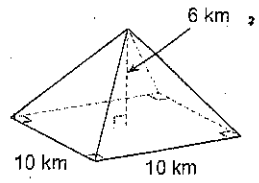
$V = 36\ cm^3$

4) 

$V = B \cdot H$

$V = \left(\frac{1}{2} \cdot 4 \cdot 3\right)(4)$

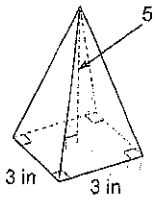
$V = 24\ m^3$

5) 

$\frac{1}{3}BH$

$\frac{1}{3}(100)(6)$

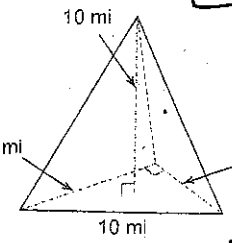
$V = 200\ km^3$

6) 

$\frac{1}{3}BH$

$\frac{1}{3}(9)(5)$

$V = 15\ in^3$

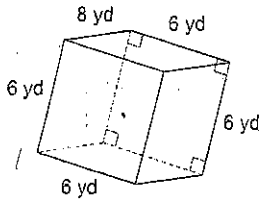
7) 

$\frac{1}{2}(6)(8)$

$V = \frac{1}{3}BH$

$\frac{1}{3}(24)(10)$

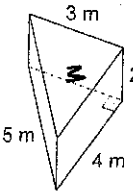
$V = 80\ mi^3$

8) 

$V = BH$

$V = 48(6)$

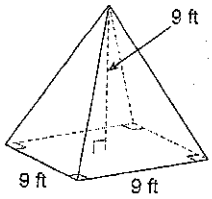
$V = 288\ yd^3$

9) 

$\frac{1}{2}(4)(3) = 6$

$6(2)$

$V = 12\ m^3$

10) 

$\frac{1}{3}BH$

$\frac{1}{3}(81)(9)$

$V = 243\ ft^3$