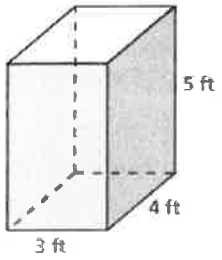
NAME: _____ DATE: _____

SURFACE & VOLUME PERIOD: _____

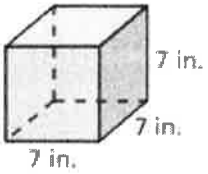
Review

Find the surface area of the prism.

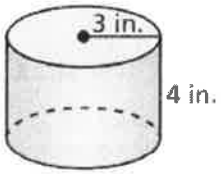
1.



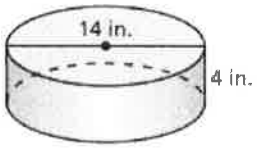
2.



3.

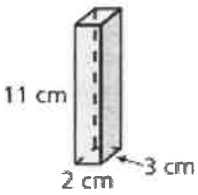


4.

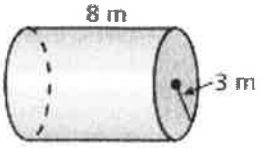


Find the volume of each prism.

5.

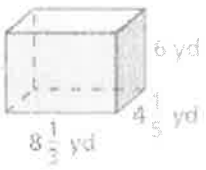


6.



7. The bag of popcorn has a volume of 96 in³. Find the ***height*** of the bag.

8.



NAME: KEY

DATE: _____

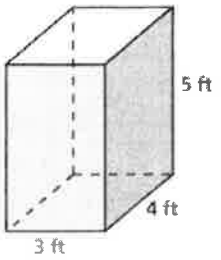
SURFACE & VOLUME

PERIOD: _____

Review

Find the surface area of the prism. Round to the nearest tenth when necessary.

1.

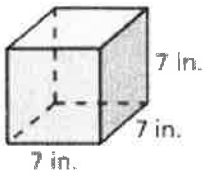


$SA = 2(3)(4) + 2(3)(5) + 2(5)(4)$

$SA = 24 + 30 + 40$

$SA = 94 \text{ ft}^2$

2.

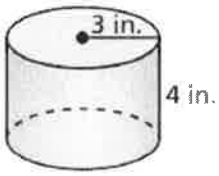


$SA = 6(7)^2$

$SA = 6(49)$

$SA = 294 \text{ in}^2$

3.



$r = 3 \quad d = 6$

$SA = 2\pi(3)^2 + 2\pi(3)(4)$

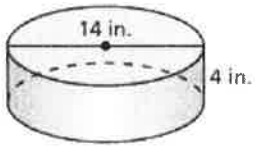
$SA = 18\pi + 24\pi$

$SA = 42\pi$

$SA = 131.9 \text{ in}^2$

$SA = 2(\text{Area of } \odot) + \text{Circumference}(\text{Height})$

4.



$d = 14 \quad r = 7$

$SA = 2\pi(7)^2 + 2\pi(7)(4)$

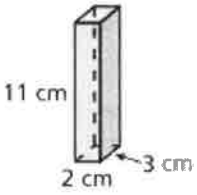
$SA = 98\pi + 56\pi$

$SA = 154\pi$

$SA = 483.8 \text{ in}^2$

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

5.



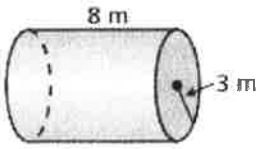
$V = Bh$

$V = lwh$

$V = 3(2)(11)$

$V = 66\ cm^3$

6.



$V = Bh$

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

$V = 226.2\ m^3$

7. The bag of popcorn has a volume of 96 in^3. Find the ***height*** of the bag.

$V = Bh$

$V = lwh$

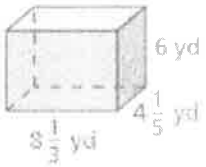
$96 = 4(4.8)h$

$\frac{96}{19.2} = \frac{19.2h}{19.2}$

$5 = h$

in

8.



$V = Bh$

$V = lwh$

$V = 8\frac{1}{3}\left(4\frac{1}{5}\right)(6)$

$V = 210\ yd^3$