Name: $\qquad$

## ACC Review for Surface Area and Volume (mostly Volume)

Directions: Find the surface area and volume for the following prism.

$S A=$ $\qquad$
$V=$ $\qquad$

Directions: Find the surface area and volume for the following pyramid.
2.


Directions: Find the surface area for the following pyramid.

$\qquad$

Directions: Find the volume for the following pyramid.
4.

$V=$ $\qquad$
5. Find surface area and volume.


Find the volume for the following figures.
Directions: Find the volume, and surface area of the solid, round to the nearest tenth if needed.

8.

10.

12.

7.


4 in.
9.

11.

13.

14.

16.

18.

20.

23.

24. Find the expression for the volume of the prism.

25.

26. A frustum of a cone is a part of the cone with two parallel bases. The height of the frustum of the cone is half the height of the original cone.
a. Find the surface area of the original cone.
b. Find the lateral area of the top of the cone.
c. Find the area of the top base of the frustum.
d. Use your results from parts $\mathbf{a}, \mathbf{b}$, and $\mathbf{c}$ to find the surface area of the frustum of the cone.


A
27. Susan has a fish tank in the shape of a cylinder that is 26 inches tall. The diameter of the tank is 12 inches. If there are 2 (even) inches of rocks in the bottom, how much water is needed to fill the tank?

## Cylinder and Cone Homework:

## Pg 732 \#s: 2,9,10, 14, 20, 24, 25 <br> Pg 740 \#s: 2-4, 9,10, 13,18, 20, 23

Solutions:
Pg 732 2: $754.09: 763.4$ 10: $3155.4 \quad 14: 14$ 20: 2.52 yd 25: 304.1
 inches, 0.4 cubic feet and 8 Planters.

## Sphere Homework:

## Pg 746 \#s: 4, 13, 14, 18-21, 23-34

Solutions from book:
Pg 746
$\begin{array}{llllll}\text { 4: } 155.2 & \text { 13: } 233.4 & \text { 14: } 192193.1 & \text { 18: } 1867.6 & \text { 19: } 21990642871 & \text { 20: } 130.4\end{array}$
21: $12.3 \quad$ 23: it will overflow $\quad 24: 2 / 3 \quad$ 25: d would need to be approx. 500 cm
26: 52.1
32: 1282.8
27: 11494.0
28: 32.7
29: 1874017.6
30: 48.3
31: 162.86

