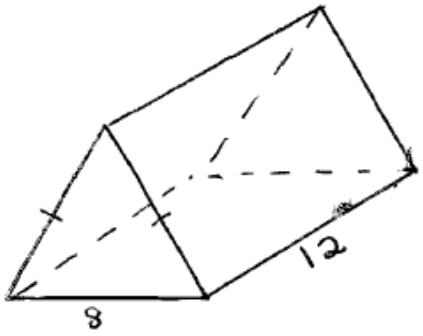
Geometry HW #_____ Name_____

Ch 12

Review A **SHOW WORK** Per_____ Col_____ Date_____

Give exact answers in simplest form, unless otherwise requested.

1. Find lateral area, total area, and volume.

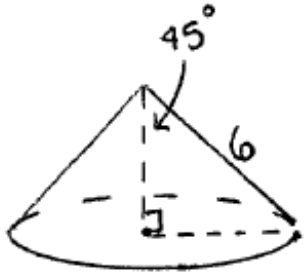



LA =

TA =

V =

2. Find lateral area, total area, and volume.

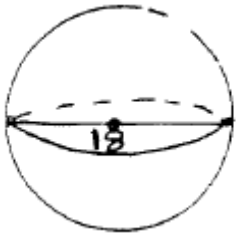



LA =

TA =

V =

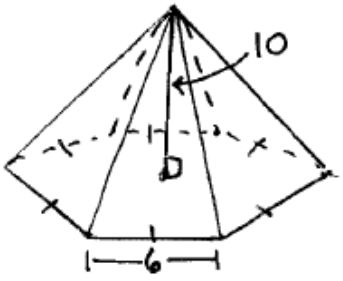
3. Find surface area and volume.




SA =

V =

4. Find the volume of the regular hexagonal pyramid.




V =

5. The volume of a cylinder is 452.4 $in^3$, and its height is 4 in. Find the total area of the cylinder. Use $\pi \approx 3.14$ and round answer to the nearest tenth.

TA =

6. A rectangular diving pool measures 50 feet long and 30 feet wide, and it is 17 feet deep. If it takes 7.5 gallons of water to fill 1 $ft^3$ of space, about how many gallons of water would be needed to fill the pool?

7. The volumes of 2 similar prisms are 32 $cm^3$ and 500 $cm^3$.
Find (a) the ratio of their heights (b) the ratio of their total areas

8. Three rubber balls of equal volume are fit snugly inside a hollow cylinder. Find the airspace inside the cylinder around the rubber balls. Use $\pi \approx 3.14$ and round answer to the nearest tenth.

Answers: 1. LA = 288, TA = $288+32\sqrt{3}$, V = $192\sqrt{3}$ 2. LA = $18\sqrt{2}\pi$, TA = $18\sqrt{2}\pi+18\pi$, V = $18\sqrt{2}\pi$
3. SA = $324\pi$, V = $972\pi$ 4. V = $180\sqrt{3}$ 5. 376.8 $in^2$ 6. 191,250 gal. 7.(a) 2 : 5 (b) 4:25
8. 50.2 $in^3$