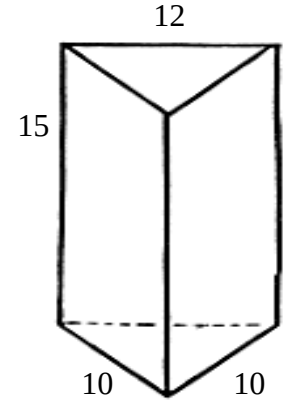
Geometry Second Semester Review Name_____

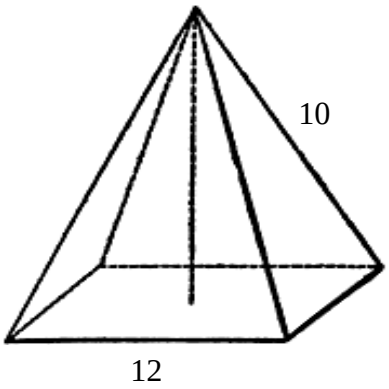
Chapter 12

Give all answers in simplest form. No decimals! (Formulas on back)

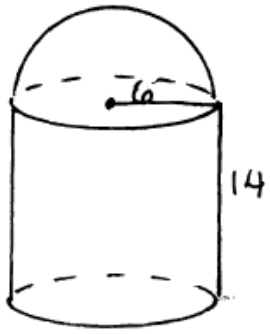
1. Find the total area and volume of the triangular prism.



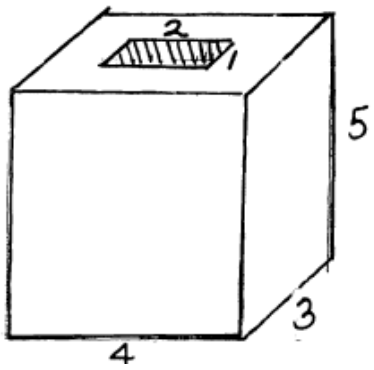
2. Find the total area and volume of the regular square pyramid.



3. Find the volume of the solid.



4. Find the volume of the block.



5. The volume of a cube is 27 in^3. Find the total surface area of the cube.

6. The surface area of a sphere is 64π cm^2. Find the volume of the sphere.

7. The volume of a cone is 12π. Its height is 4. Find the total area of the cone.

8. The volumes of 2 similar prisms are 125 in^3 and 8 in^3.
a. What is the ratio of their heights? b. What is the ratio of their lateral areas?

9. The radii of 2 similar cones are in a ratio of 3:4. The total area of the smaller cone is 180π. Find the total area of the larger cone.

Prism	Lateral Area = ph	Cylinder	Lateral Area = $2\pi rh$	Sphere
	Volume = Bh		Volume = $\pi r^2 h$	Surface Area = $4\pi r^2$
Pyramid	Lateral Area = $\frac{1}{2}pl$	Cone	Lateral Area = πrl	Volume = $\frac{4}{3}\pi r^3$
	Volume = $\frac{1}{3}Bh$		Volume = $\frac{1}{3}\pi r^2 h$	