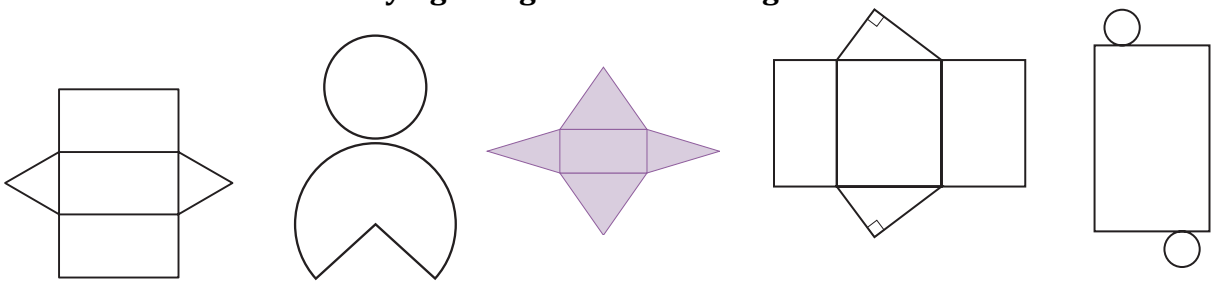
Name:_____
Class:_____
Hour:_____

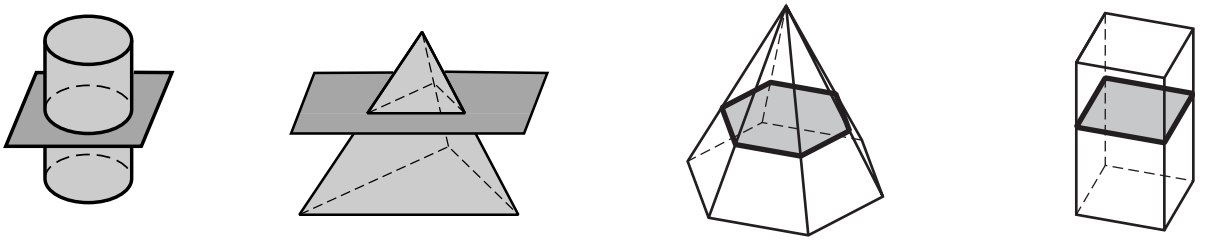
Geometry B What You Need to Know (Chapter 10 Test)

Be able to label and classify figures given the net diagram



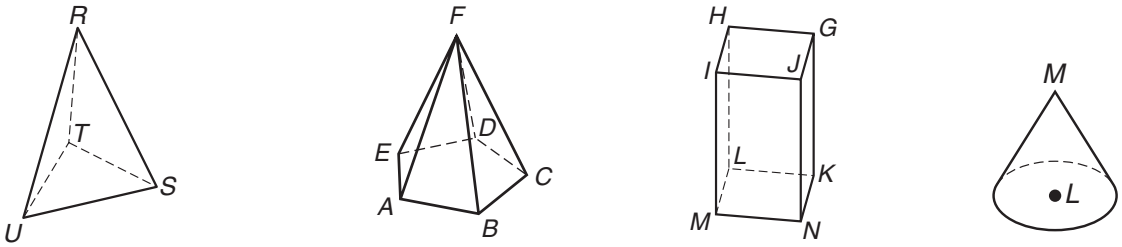
_____ _____ _____ _____ _____

Be able to describe the cross section of a figure



_____ _____ _____ _____

Be able to classify a figure and name the vertices, edges, and bases of a figure



CLASSIFICATION	CLASSIFICATION	CLASSIFICATION	CLASSIFICATION
VERTICIES	VERTICIES	VERTICIES	VERTICIES
EDGES	EDGES	EDGES	EDGES
BASE	BASE	BASE	BASE

Name:_____
Class:_____
Hour:_____

Be able to describe the effect of changing the dimensions of a figure on the surface area

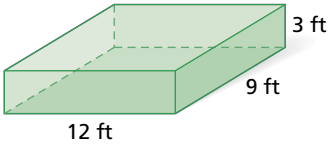
THE GENERAL RULE IS:

IF YOU MULTIPLY ALL ORIGINAL DIMENSIONS BY _____ TO CREATE NEW DIMENSIONS THEN THE ORIGINAL SURFACE AREA WILL BE MULTIPLIED BY _____ TO MAKE THE NEW SURFACE AREA.

The dimensions of a 12 in. by 9 in. by 24 in. right rectangular prism are multiplied by $\frac{2}{3}$. Describe the affect on the surface area.

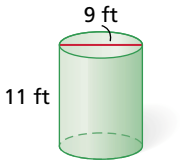
_____

The dimensions are doubled.



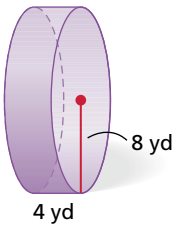
_____

The dimensions are tripled.



_____

The dimensions are cut in half.



_____

Name:_____
Class:_____
Hour:_____

Be able to describe the effect of changing the dimensions of a figure on the Volume

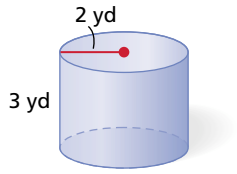
THE GENERAL RULE IS:

IF YOU MULTIPLY ALL ORIGINAL DIMENSIONS BY _____ TO CREATE NEW DIMENSIONS THEN THE ORIGINAL VOLUME WILL BE MULTIPLIED BY _____ TO MAKE THE NEW VOLUME.

The dimensions of a cylinder with diameter 2 ft and height 1 ft are reduced by half. Describe the affect on the volume.

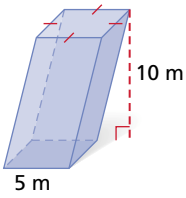
_____

The dimensions are multiplied by 5.



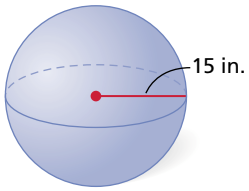
_____

The dimensions are multiplied by $\frac{3}{5}$.



_____

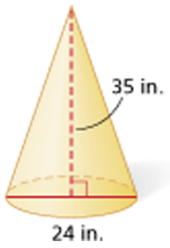
The dimensions are doubled.



_____

Be able to find the lateral area and surface area of a given figure.

Find the lateral area and surface area of each right cone. Give your answers in terms of π.

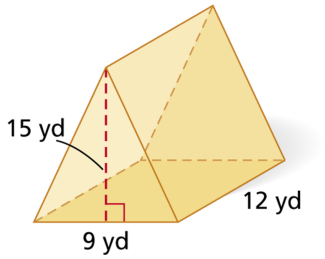


L.A. = _____

S.A. = _____

Name:_____
Class:_____
Hour:_____

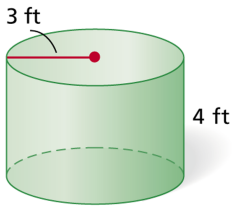
Find the lateral area and surface area of each right prism.



L.A. = _____

S.A. = _____

Find the lateral area and surface area of each right cylinder. Give your answers in terms of π.

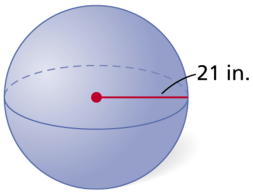


L.A. = _____

S.A. = _____

Find each measurement. Give your answers in terms of π.

the surface area of the sphere

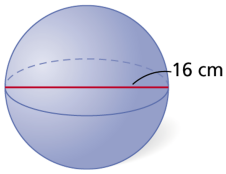


S.A. = _____

Be able to find the volume of a given figure.

Find each measurement. Give your answers in terms of π.

the volume of the sphere



VOLUME = _____

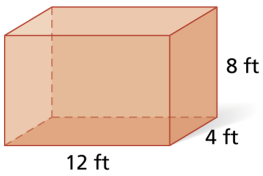
Name:_____
Class:_____
Hour:_____

Find each measurement. Give your answers in terms of π.

the volume of a cylinder with base area 64π m^2 and a height 3 meters less than the radius

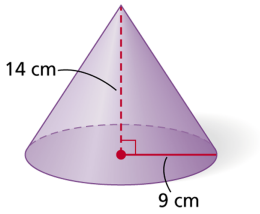
VOLUME = _____

Find the volume of each prism.



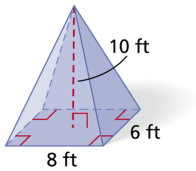
VOLUME = _____

Find the volume of each cone. Give your answer in terms of π



VOLUME = _____

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



VOLUME = _____

Name:_____
Class:_____
Hour:_____

Be able to use volume to solve for the radius, or surface area of a sphere

Find each measurement. Give your answers in terms of π.
the surface area of the sphere of a sphere with volume 7776π in^3

S.A. = _____

Find each measurement. Give your answers in terms of π.
the radius of a sphere with volume 288π cm^3

Radius r = _____

Be able to solve real world problems using surface or lateral area

If the pattern shown is used to make a paper cup, what is the diameter of the cup?