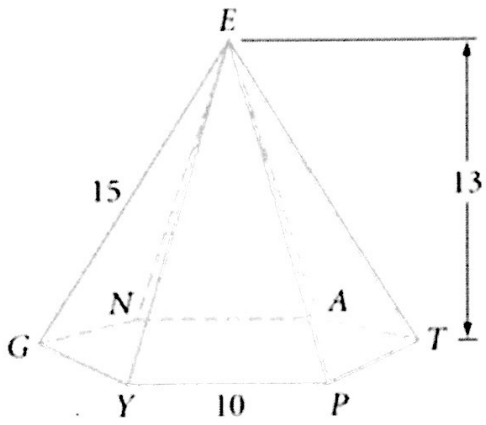
11.1 and 1.8 Geometry of Solids HW Day 2 **Name** Key

Geometry 3313 **Date** _____ **Period** _____

Learning Targets:

a. I can identify parts of geometric solids
b. I can classify geometric solids

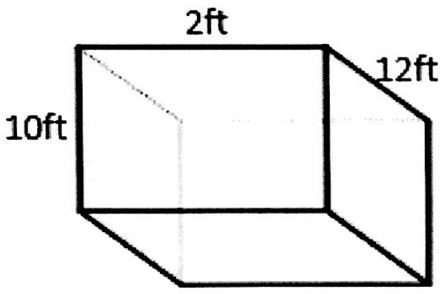
Use the figure to the right to answer questions #1-7.



1. Name the Solid Hexagonal Pyramid
2. Name the base of the pyramid GYPTAN
3. Name the vertex or apex of the pyramid E
4. How many faces are there? 7
5. How many edges are there? 12
6. How many vertices are there? 7
7. What is the height of the pyramid?

Height = 13

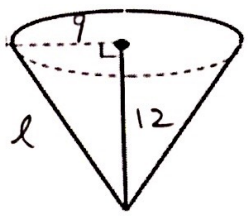
Use the figure to the right to answer questions #8-12. Assume that the shaded polygons are the Bases.



8. Name the Solid Rectangular Pyramid
9. How many faces are there? 6
10. How many edges are there? 12
11. How many vertices are there? 8
12. What is the height of the prism?

Height = 2 ft

13. Determine the slant height of the cone if the diameter of its base is 18in and its height is 12in. Add labels to your picture.



$9^2 + 12^2 = l^2$

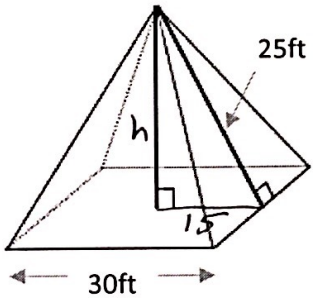
$81 + 144 = l^2$

$225 = l^2$

$15 = l$

Slant Height = 15 in

14. Determine the height of the square pyramid using figure to the right.



$15^2 + h^2 = 25^2$

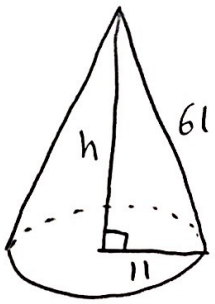
$225 + h^2 = 625$

$h^2 = 400$

$h = 20$

Height = 20 ft

15. Determine the height of a cone that has a radius of 11 cm, and slant height of 61 cm.



$11^2 + h^2 = 61^2$

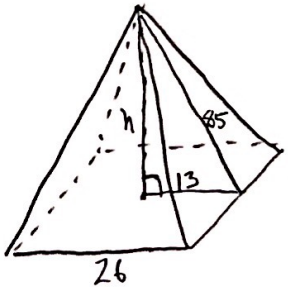
$121^2 + h^2 = 3721$

$h^2 = 3600$

$h = 60$

Height = 60 cm

16. Determine the height of a square pyramid that has a slant height of 85 in and a square base with side lengths of 26 inches each.



$13^2 + h^2 = 85^2$

$169 + h^2 = 7225$

$h^2 = 7056$

$h = 84$

Height = 84 in