

**Geometry**

**Unit Three – G.GMD.3-4 Review (HW12)**

For each multiple choice question, please circle your answer.

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Period: \_\_\_\_\_

1. The lateral faces of a prism are the non-base faces. T or F
2. A triangular prism has a 6 faces. T or F
3. A cube has 8 congruent square faces. T or F
4. A right triangular prism has right triangular lateral sides. T or F
5. If a hexagonal prism has some parallelogram faces that are not rectangles then it is oblique. T or F
6. In all prisms there will always be more lateral faces then base faces. T or F
7. A square pyramid has 5 faces. T or F
8. The lateral edge of a pyramid is equal to the slant height the lateral face. T or F
9. The height of a right square pyramid is always less than the slant height of a lateral face. T or F
10. The ratio of volume between a prism and a pyramid with the same base and height is 3:1. T or F
11. If a prism and a pyramid have the same base and height, then the volume of pyramid will always be the greater value. T or F
12. The volume of a cylinder is  $\frac{1}{3}$  the amount of a cone with the same radius and height. T or F
13. Match the following terms to the diagram.

Given the square pyramid. Use each value ONLY ONCE.

\_\_\_\_\_ Height

\_\_\_\_\_ Lateral Face

\_\_\_\_\_ Slant Height

\_\_\_\_\_ Lateral Edge

\_\_\_\_\_ Base

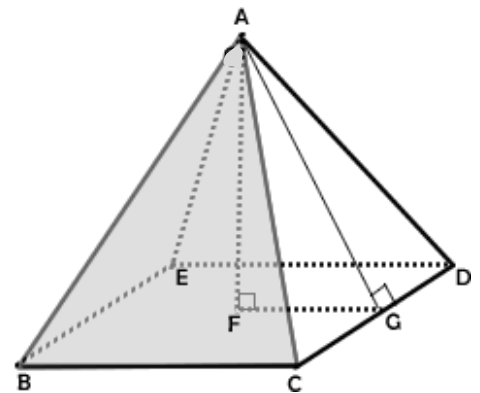
A.  $\triangle EAD$

B.  $\overline{AG}$

C.  $\overline{AB}$

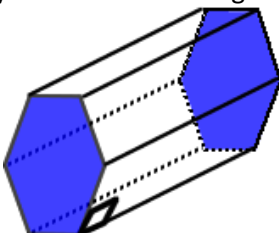
D.  $\overline{AF}$

E. Square EDCB

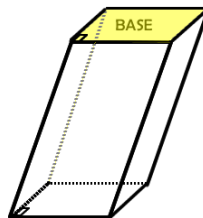


14. Properly name the following solids.

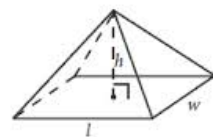
a)



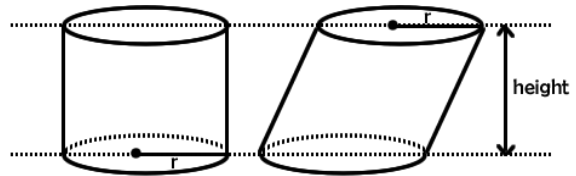
b)



c)



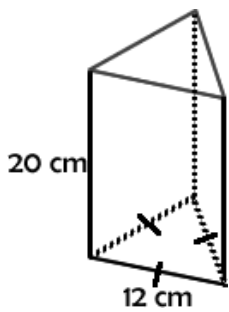
15. Cavalieri's principle says that these two prisms have equal volume. Explain why that is true?



16. A pyramid and a prism have the same base and height. If the volume of the prism is  $54 \text{ cm}^3$ , what is the volume of the pyramid? Leave your answer in exact form.

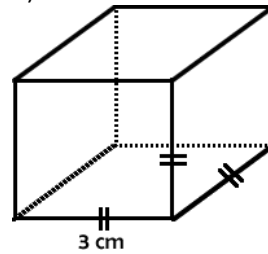
17. Determine the volume of the solids. (Lines that appear perpendicular are perpendicular.)

a)



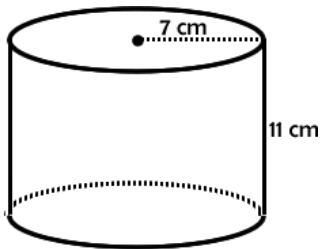
Volume = \_\_\_\_\_ (E)

b)



Volume = \_\_\_\_\_ (E)

c)



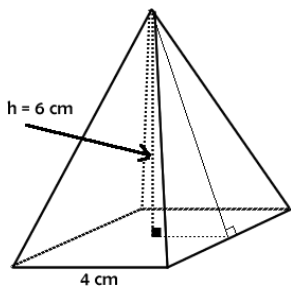
Volume = \_\_\_\_\_ (E)

d)



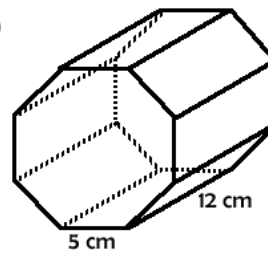
Volume = \_\_\_\_\_ (2 dec)

e) Given that the solid below is a square pyramid:



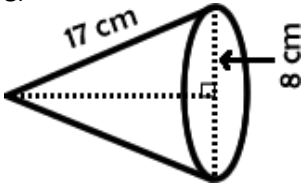
Volume = \_\_\_\_\_ (E)

f)



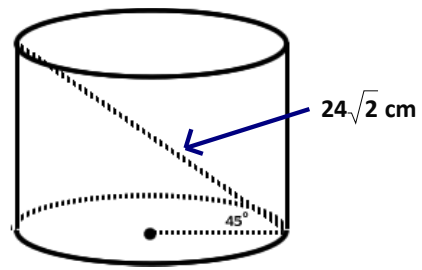
Volume = \_\_\_\_\_ (2 dec)

g)



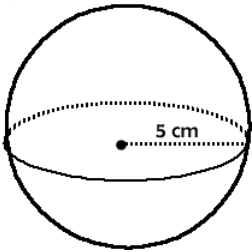
Volume = \_\_\_\_\_ (E)

h)



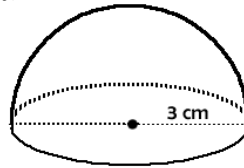
Volume = \_\_\_\_\_ (E)

i)



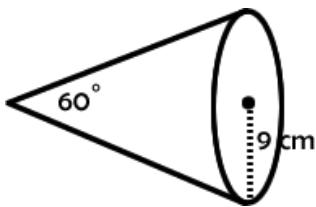
Volume = \_\_\_\_\_ (2 dec.)

j)



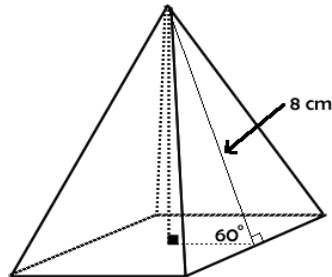
Volume = \_\_\_\_\_ (E)

k)



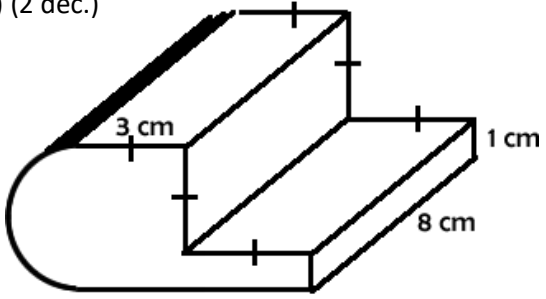
Volume = \_\_\_\_\_ (E)

l) Given the following is a square pyramid:



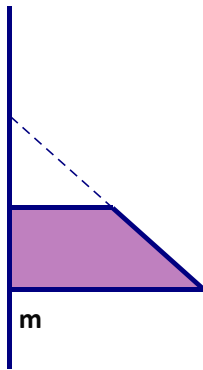
Volume = \_\_\_\_\_ (E)

m) (2 dec.)



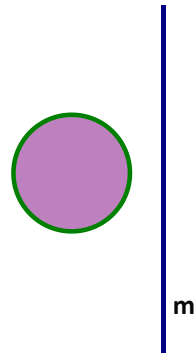
18. Describe the solid that is formed by rotating each of these figures about line m and sketch it.

a)



Name/Description

b)



Name/Description