

Due: 7/5/17 at 4:00PM

Instructions: Your answers to the following questions do not need to be lengthy or written in complete sentences, but should reflect preparation for our discussion about Chapter 11 at the beginning of class.

Questions:

1. What is Euler's formula, and what does it mean?
2. Which solids among prisms, cylinders, pyramids, cones, and spheres are polyhedra? Explain.
3. How are prisms and cylinders similar? How are they different?
4. What is the difference between the lateral area and the surface area of a prism or cylinder?
5. Why does the formula for the surface area of a regular pyramid contain the slant height of the pyramid rather than the height?
6. How are pyramids and cones similar? How are they different?
7. A rectangular prism (or box) has three pairs of opposite congruent faces that are rectangles. Which of these should be used as the bases to calculate the surface area and volume? Explain.
8. What single formula can be used to calculate the volume of both a pyramid and a cone?
9. A *tetrahedron* is a triangular pyramid all of whose faces are congruent equilateral triangles. How many faces does a tetrahedron have, and which one should be used to calculate its surface area and volume?
10. For which of the solids you have studied in this chapter do you need to use π in the calculation of the surface area and volume? What is an easy way to remember which ones these are?

Muddiest Point:

What questions do you have about the notes you took in Chapter 11, or anything from this week?



MML Homework Questions:

Are there any MML homework problems from Chapter 11 that you would like to discuss?