

## **Chapter 11 “Quest” #2 Prep**

1. Find the Surface Area of...
  - a. Prisms/Cylinders
    - i.  $2B + Ph$
  - b. Pyramids/Cones
    - i.  $B + 1/2 Pl$
  - c. Spheres
    - i.  $4\pi r^2$
    - ii. Hemispheres
      1. Half sphere + great circle
2. Find the Volume of...
  - a. Prisms/Cylinders
    - i.  $Bh$
  - b. Pyramids/Cones
    - i.  $(Bh)/3$
  - c. Spheres (and hemispheres)
    - i.  $\frac{4}{3}\pi r^3$
3. Find sides lengths/radius lengths/slant heights given volume or surface area of a solid
4. Find the midpoint of a segment in 3 dimensions
5. Find the length of a segment in 3 dimensions
6. Graph a point in 3 dimensions
7. Find the Surface Area of...
  - a. Tetrahedrons
    - i.  $4\left(\frac{s^2\sqrt{3}}{4}\right)$
  - b. Octahedrons
    - i.  $8\left(\frac{s^2\sqrt{3}}{4}\right)$
8. Find the Volume of...
  - a. Tetrahedrons and Octahedrons
9. Surface area and Volume of composite figures
  - a. Uses all formulas from part 1 of the chapter
  - b. Includes frustums

**\*\*Will also need to review special right triangles, Pythagorean Triples, and area of a regular polygon\*\***