**Formula’s Quiz Review**

Density = Mass/volume

Pressure = Force/surface area

Volume = Length x Width x Height

1. The density of a cube that measures 1.00 cm on each side and has a mass of 2.0 g is \_\_\_\_\_\_\_. Will it sink or float in water?
2. A force of 500 N is applied to an area of 1.00 m2, 0.50 m2, 0.25 m2, and 0.10 m2. Over which area is the pressure greatest?
3. What is the density of a liquid with a mass of 17.4 grams and a volume of 20 mL?
4. Suppose a gas exerts a force of 252 N on a piston having an area of 0.430 m2. What is the pressure of the piston in Pascals?
5. The hulk is charging at a wall with a force of 17.8 N and superman is charging at the same wall from the opposite direction with a force of 23.2 N. What is the net force? Is it balanced or unbalanced?