

Quiz 1 – August 28, 2019**Useful Information:** 1 metric ton = 1×10^3 kg (exactly)

$$d = \frac{m}{V}$$

1. (9 pts) A particular atom contains 72 protons and 108 neutrons.
 - a. Please write the **complete chemical symbol** for this atom.

 - b. This element has several naturally occurring **isotopes**. In terms of the number and types of subatomic particles they contain, **how are the isotopes similar and how are they different?**

2. (16 pts) News reports in 2011 revealed that Japan's crippled Fukushima nuclear plant experienced multiple leaks in storage tanks built to hold 3.000×10^5 metric tons of radioactive water. Suppose that all the water in the tanks leaked into an area the size of Winthrop's campus, approximately 1.72×10^6 m². Assuming that the water spread evenly over the entire area, how deep would it be? Express your answer in cm. (The density of water is 1.000 g/cm³.)

