Isotopes and Average Weighted Atomic Mass

1. An atom has 19 protons, 19 electrons and 22 neutrons.

   Z = _____   A = _____ M_m = _____

   What is the identity of the element?   _____

   Write the isotopic symbol _____

2. Which of the following are isotopes?

   $^{53}_{24}X$ $^{24}_{53}X$ $^{50}_{24}X$ $^{48}_{23}X$ $^{48}_{22}X$

3. How many protons, electrons, and neutrons? Identify the element. $^{235}_{92}X$

4. Magnesium has three naturally occurring isotopes; Mg-24, Mg-25, and Mg-26. The isotopic masses and fractional abundances are in the following table.

Isotope	Isotopic Mass, μ	Percent Abundance
$^{24}_{12}Mg$	23.9850	78.99
$^{25}_{12}Mg$	24.9858	10.00
$^{26}_{12}Mg$	25.9826	11.01

   What is the fractional abundance of these isotopes?

   Calculate the average weighted atomic mass, in μ.