Calculating Isotopic Abundances

① Nitrogen has two isotopes, N-14 and N-15. If the relative atomic mass of nitrogen is 14.007 what is the percentage abundance of each isotope.

② Copper has two isotopes Cu-63 and Cu-65. Given that copper has an atomic weight of 63.546, what is the percentage abundance of each isotope?

③ A sample of naturally occurring silicon consists of Si-28, Si-29 and Si-30. If the relative atomic mass of silicon is 28.0855 and the abundance of Si-29 is 4.67%, what are the abundances of Si-28 and Si-30?

④ Determine the percentage abundance of fe-57 and fe-58.

Isotope	% abundance
fe - 54	8.536
fe - 56	90.007
fe - 57	
fe - 58	

Relative atomic mass of fe = 55.845.

⑤ Lead has three isotopes, Pb-206, Pb-207 and Pb-208. If Pb-207 and Pb-208 are present in equal amounts, Calculate their percentage abundances if it's relative atomic mass is 207.19.