

Answers to problems in page 89

Answers to Practice Problems B

- Both isotopes have 17 protons and 17 electrons. Chlorine-35 has 18 neutrons, and chlorine-37 has 20 neutrons.
- Both have 20 protons and 20 electrons. Calcium-42 has 22 neutrons. Calcium-44 has 24 neutrons.
- Determine the number of protons, electrons, and neutrons for the following:
 - ${}^{41}_{20}\text{Ca}$ **Ans.** protons, 20; electrons, 20; neutrons, 21
 - ${}^{108}_{47}\text{Ag}$ **Ans.** protons, 47; electrons, 47; neutrons, 61

Homework

GENERAL

Additional Practice

- Calculate the number of protons, electrons, and neutrons in potassium-39 and potassium-41. The atomic number of potassium is 19. **Ans.** potassium-39: protons = 19, electrons = 19, neutrons = 20; potassium-41: protons = 19, electrons = 19, neutrons = 22
- Lithium has two stable isotopes, lithium-6 and lithium-7. The atomic number of lithium is 3. Explain how the two are the same and how they are different. **Ans.** Both have three protons and three electrons; lithium-7 has four neutrons but lithium-6 has three neutrons.

 Logical