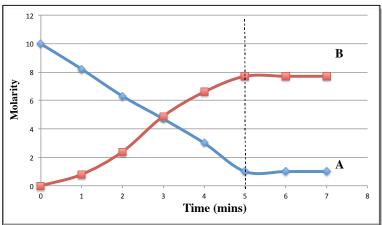
## **CONCEPT: CHEMICAL EQUILIBRIUM**

Most chemical reactions do not go to *completion*.

- \_\_\_\_\_ do not completely convert into \_\_\_\_\_ and reactant concentrations do not go down to \_\_\_\_\_.
- Instead, these reactions reach a state of *chemical equilibrium*, in which the reaction moves in the forward and reverse direction.

These reactions are also called \_\_\_\_\_\_ reactions and are represented by using a double arrow.





PRACTICE: Which one of the following statements does not describe the equilibrium state?

- a. While at equilibrium, a dynamic process is still occurring.
- b. The concentration of the reactants is equal to the concentration of the products.
- c. The concentration of the reactants and products reach a constant level.
- d. At equilibrium, the net concentration of all species is not changing.
- e. All are true.