Name

3-2A Lesson Master

Questions on SPUR Objectives
See Student Edition pages 215–219 for objectives.

PROPERTIES Objective E

1. Determine whether each expression is a linear combination.

   a. $3x + 4y$ _____

   b. $8.3k - 9.2j$ _____

   c. $2x^2 - 3x$ _____

   d. $6a + 5b - 2c$ _____

In 2 and 3, a. write a linear combination representing the total cost, and b. determine whether the situation described is *discrete* or *continuous*.

2. Apples cost \$0.75 each and bananas cost \$0.45 each.

   a. _____ b. _____

3. Apples cost \$1.29 per pound and bananas cost \$0.79 per pound.

   a. _____ b. _____

USES Objective H

4. At a party store, helium balloons cost 79¢ each and a box of favors costs \$11.95. You have \$40 to spend and you need two boxes of favors. How many balloons can you buy? There is no sales tax. _____

5. A chemist has solutions of hydrochloric acid in two different concentrations. One solution has 10 moles per liter; the other has 2.5 moles per liter. She mixes x liters of the first solution and y liters of the second solution.

   a. How many moles of acid are in x liters of the first solution? _____

   b. How many moles of acid are in y liters of the second solution? _____

   c. How many moles of acid are in the mixture? _____

   d. The chemist wants to have 6 moles of acid in the final mixture. She uses 1 liter of the second solution. How many liters of the first solution should she use?

   _____

6. Describe a situation leading to the equation $3x + 5y = 45$.

   _____

   _____

   _____