Algebra 1 B **Name _____**

Unit 6 Objective 5 Practice **Period _____ Date _____**

Write and solve a system of linear equations for each. Write your answer in a complete sentence.

1. At the Gap, 5 pairs of jeans and 2 sweatshirts cost $166, while 3 pairs of jeans and 4 sweatshirts cost $164. Find the cost of one sweatshirt.

2. A basketball player scored 19 points by shooting two-point and three-point baskets. If she made a total of eight baskets, how many of each type did she make?

3. Ninety-eight passengers rode in a train from Boston to Denver. Tickets for regular coach seats cost $120, and sleeper car seats cost $290. The receipts from the trip totaled $19,750. How many passengers purchased each type of ticket?

4. At Knoebels's amusement park, five hot dogs and two drinks cost $19.75. Three hot dogs and three drinks cost $15. Find the cost of one hot dog and one drink.

5. The local community college theater put on a production of *Chicago.* There were 186 tickets sold, some for $16 (nonstudent price) and others for $12 (student price). If the receipts for one performance totaled $2640, how many of each type of ticket were sold?

6. Madison has a pocket full of change consisting of dimes and quarters. The total value is $3.15. There are 7 more quarters than dimes. How many of each coin are there?

7. A rental car company rents a compact car for $20 a day, plus $0.25 per mile. A midsize car rents for $30 a day, plus $0.20 per mile. Find the number of miles at which the cost to rent either car would be the same. What would the cost be?

8. One phone company charges $0.15 per minute for long-distance calls. A second company charges only $0.10 per minute for long-distance calls, but adds a monthly fee of $4.95. Find the number of minutes of long-distance calling for which the total bill from either company would be the same.