Name _____ Date_____

Chapter 7 Word Problems

1) The bakery sells muffins and doughnuts. Sarah bought six muffins and eight doughnuts and her total cost was $44. Craig bought three muffins and eleven doughnuts and his total cost was $39.50. Write a system of equations and solve to find the cost of each muffin and the cost for each doughnut.

2) The bowling alley charges a fee for each round you bowl and an additional fee for playing Skee Ball. Sandra bowled three rounds and played Skee Ball five times. Her total cost was $23.25. Her sister bowled twice and played Skee Ball six times and her total cost was $19.00. Write a system of equations and solve to find the cost for each round of bowling and each time you play Skee Ball.

3) An adult ticket to the movies costs $12 and a child's ticket costs $8. For Annabelle's birthday she paid $92 for her guests to go to the movies. A total of 10 people attended her birthday party. Write a system of equations and solve to determine how many adults and how many children attended.

4) You are shopping for school supplies. Pencils cost $0.30 each and pens cost $1.20 each. You spend a total of $18.90 on pens and pencils. You bought a total of 27 items. Write a system of equations and solve to determine how many pencils and how many pens you bought.

5) Tracy has $168 dollars in her bank account. She saves $22 a week babysitting. Her sister has $12 in her bank account and saves $34 mowing lawns. Write a system of equations and solve to determine when the two sisters will have the same amount of money.

6) Ace Plumbing charges a $100 service fee for coming to your house and $80 an hour for labor. Backup Plumbing does not charge a service fee but charges $100 an hour. Write a system of equations and solve to find the number of hours it would take for the two companies to charge the same amount. For how many hours would you choose Ace Plumbing?

7) Crystal has two side jobs to make extra money. She charges $6 an hour to walk her neighbor's dog and $10 an hour doing yard work. She needs to make at least $120 to go on her ski vacation but her parents will not allow her to work for more than 25 hours a week. Write a system of **inequalities** to represent this situation. Do **not** solve.

8) Gretchen is selling bracelets for $8 a piece and headbands for $12 a piece. She needs to make at least $240. She only has enough beads to make 45 items. Write a system of **inequalities** to represent this situation. Do **not** solve.