Name: _____ Date: _____

BLM 9–7

Section 9.3 Extra Practice

1. Solve each system of linear equations using an algebraic method. Verify your answers graphically.

a) $y = -4x + 5$
$y = 2x - 4$

b) $5x + 2y = 0$
$4x + y = 6$

c) $2x + 3y = -7$
$x - 3y = 1$

2. Solve each system of linear equations using an algebraic method. Verify your answers by substituting into the original equations.

a) $4x - 5y = 15$
$7x - 6y = 7$

b) $\frac{-x}{2} + \frac{y}{3} = 1$

$\frac{-x}{2} - \frac{y}{3} = 1$

c) $\frac{1}{3}y = \frac{1}{3}x + 6$

$\frac{x+y}{2} = 3$

3. Solve each system of linear equations, if possible. Justify your answer.

a) $12x + 10y = 0$
$-6x + 5y = 2$

b) $3x - 5 = y$
$6x - 2y = 0$

c) $2y = x - 3$
$2x = 4y + 6$

4. Two angles are complementary. One angle is 6° more than twice the other angle. Determine the angles.

5. To see a play, 4 adults and 11 children paid \$148. The next night, 7 adults and 13 children paid \$209. What is the cost for one child? What is the cost for one adult?

6. A father is four times as old as his daughter. Five years ago, he was seven times as old as his daughter. Find the present ages of the father and the daughter.

7. Cashew nuts are sold at \$15.00/kg. Walnuts are sold at \$12.00/kg. What quantities of each nut would a store owner put into a 100-kg barrel so that it could be sold for \$13.20/kg?

8. Determine the values of x and y in the following diagram if $3x + 13y$ and $4x - y$ are angles.