DIRECTIONS: Solve the word problems. Show all work. Remember to include the equation(s) and the solutions.

1. Amy has $8 less than Maria. Together they have $30. How much money does each girl have?

2. Jim's weekly pay is two-thirds of Alicia's. Together they earn $600 per week. What is each person's weekly pay?

3. Crunchy Snacks, LLC, is selling cases of Ruffles® and Tostitos®. Cases of Ruffles® are priced at $7.00 each and cases of Tostitos® at $7.50 each. Last week, Crunchy Snacks sold 60 more cases of Ruffles® than Tostitos® for a total amount of $2160. How many cases of Ruffles® did Crunchy Snacks sell?

4. At the final home football game, the concession stand sold slices of pizza for $0.75 each and hamburgers for $1.35 each. 40 more slices of pizza were sold than hamburgers and sales totaled $292.50. How many slices of pizza were sold?

5. The perimeter of a certain basketball court is 266 ft, and its length is 35 ft more than its width. Find the dimensions of the court.

6. If one side of a square is increased by 8 cm and an adjacent side is decreased by 2 cm, a rectangle is formed with a perimeter of 40 cm. Find the length of a side of the square.

7. The measure of the supplement of an angle is 12° greater than three times the measure of its complement. Find the measure of the angle.

8. The degree measures of the angles of a pentagon are consecutive even integers. Find the measure of the largest angle (Hint: The sum of the measure of the angles of a pentagon is 540°).

9. At 10:30 A.M. two planes leave Houston, one flying east at 560 km/h and the other flying west at 640 km/h. At what time will they be 2100 km apart?

10. In a walkathon to raise money for research, Stephanie walked a certain distance at 5 mi/h and then jogged twice that distance at 8 mi/h. Her total time walking and jogging was 2 hours and 15 minutes. How many miles long was the walkathon?

11. A jar contains 40 coins consisting of dimes and quarters and having a total value of $4.90. How many of each kind of coin are there?

12. Larry has an annual return of $213 from $3000 invested at simple interest – some at 5% and the rest at 8%. How much is invested at each rate?
(Hint: Simple interest = amount invested •interest rate (as a decimal))