Name: _____ Algebra
Date: _____ Unit 5
Class: _____ HW 5-5

1) Samantha went to a concession stand and bought 3 pretzels and 4 sodas and paid a total of $11.25. Raza went to the same stand and bought 5 pretzels and 2 sodas and paid $8.25. Set up and solve a system of equations to determine how much each pretzel is.

2) The perimeter of a rectangle is 28in. If you double the width and triple the length the new perimeter would be 68. Find the dimensions of the original rectangle.

3) Solve the following problem using a system of equations:

A local theater is showing an animated movie. They charge $5 per ticket for a child and $12 per ticket for an adult. They sell a total of 342 tickets and make a total of $2550. We want to try to find out how many of each type of ticket they sold. Let c represent the number of children's tickets sold and a represent the number of adult tickets sold.

4) Is (-2, 5) a solution to the following system?

$y = x^2 + 9$ and $y = |x - 3|$

5) Solve the following system of equations using whatever method you prefer:

$6y = 4x - 28$ and $3y - 6x = -6$

6) Using a graph, solve the following equation: $-\frac{1}{3} - \frac{1}{6}x = -\frac{1}{2}x$

7) Eldora and Finn went to an office supply store together. Eldora bought 15 boxes of paper clips and 7 packages of index cards for a total cost of $55.40. Finn bought 12 boxes of paper clips and 10 packages of index cards for a total cost of $61.70. Find the cost of one box of paper clips and the cost of one package of index cards.