$\qquad$ Date $\qquad$ Period: $\qquad$
Writing Systems of Equations Part 1 Assignment
Write a system of equations for each situation. Make sure to define your variables. Solve the systems in any way you choose.

1. The sum of two numbers is 36 . One number is two more than the other. Find the numbers.
a) Define your variables:
b) Write the system:
c) Solve the system and tell what your answers mean.
2. Jack's school is selling tickets to a fall musical. On the first day of ticket sales the school sold 4 senior citizen tickets and 7 child tickets for a total of $\$ 133$. The school took in $\$ 73$ on the second day by selling 4 senior citizen tickets and 3 child tickets. Find the price of a senior citizen ticket and the price of a child ticket.
a) Define your variables:
b) Write the system:
c) Solve the system and tell what your answers mean.
3. Two angles are supplementary. One is $30^{\circ}$ more than two times the other. Find the angles. (Supplementary angles are two angles whose sum is $180^{\circ}$.)
a) Define your variables:
b) Write the system:
c) Solve the system and tell what your answers mean.
4. The perimeter of a rectangle is 876 cm . The length is 1 cm less than three times the width. Find the length and width.
a) Define your variables:
b) Write the system:
c) Solve the system and tell what your answers mean.
5. Seven people went to the movies. The number of adults was one more than the number of children. How many children and how many adults went to the movies?
a) Define your variables:
b) Write the system:
c) Solve the system and tell what your answers mean.
6. Jana has 25 coins, but only has dimes and nickels. She has a total of $\$ 1.65$. How many dimes and how many nickels does she have?
a) Define your variables:
b) Write the system:
c) Solve the system and tell what your answers mean.
