Algebra 2<br>Application System Word Problems

Name: $\qquad$

Define your variables. Write a system of equations. Solve algebraically or by using matrices.
1.) Calvin has $\$ 8.80$ in pennies and nickels. If there are twice as many nickels as pennies, how many pennies does Calvin have? How many nickels?
2.) A total of 78 seats for a concert are sold, producing a total revenue of $\$ 483$. If seats cost either $\$ 2.50$ or $\$ 10.50$, how many $\$ 2.50$ seats and how many $\$ 10.50$ seats were sold?
3.) Tickets to a concert cost either $\$ 12$ or $\$ 15$. A total of 300 tickets are sold, and the total receipts were $\$ 4140$. How many of each kind of ticket were sold?
4.) An investor buys a total of 360 shares of two stocks. The price of one stock is $\$ 35$ per share, while the price of the other stock is $\$ 45$ per share. The investor spends a total of $\$ 15000$. How many shares of each stock did the investor buy?

