SYSTEMS MONEY PROBLEMS

1. A student has a collection of nickels and dimes. If the collection has a total of 184 coins valued at $14.05, how many of each type of coin does he have?
   $x + y = 184$, $10x + 5y = 1405$

2. A sum of money amounting to $16.00 consists of dimes and quarters. If there are 98 coins in total, how many dimes are there? $x + y = 98$, $10x + 25y = 1600$

3. John has a sock containing quarters and half-dollars and the total value is $42.50. If the number of quarters and half-dollars were interchanged the coins would have a value of $24.00. How many quarters and half-dollars are there in the sock?
   $25x + 50y = 4250$, $50x + 25y = 2400$

4. You have been asked to make a deposit of $205.00 in loonies and ten dollar bills. If the deposit consists of 34 items, how many of each kind do you have?
   $x + y = 34$, $1x + 10y = 205$

5. Tickets to a concert cost $7.00 for students and $12.00 for adults. A total of $366.00 was raised when 38 tickets were sold. How many of each type were sold?
   $x + y = 38$, $7x + 12y = 336$

6. Tickets to a basketball game cost $4.50 for children under the age of 12 and for everyone else the cost is $8.25. If 425 tickets were sold for a total of $2756.25; how many children's and adult's tickets were sold? $x + y = 425$, $45x + 825y = 275625$

7. If six CDs and 4 cassettes cost $152.00 while 3 CDs and 7 cassettes cost $131.00, find the cost of each CD and of each cassette. $6x + 4y = 152$. $3x + 7y = 131$

8. If 12 oranges and 7 apples cost $5.02 while 6 oranges and 2 apples cost $2.00, find the cost of an orange and of an apple? $12x + 7y = 502$, $6x + 2y = 200$

9. Tickets to a concert cost $23.00 for the main floor and $16.00 for the balcony. If the receipts from the sale of 340 tickets was $6910.00, how many tickets at each price were sold? $x + y = 340$, $23x + 16y = 6910$