1) Solve using matrix equations.

$p - 2q = 1$
$p + 5q = 22$

2) Solve using matrix equations.

$4y = 7 - 2x$
$6 = 3x - 3y$

3) Solve using a graphing calculator:

$4x - 3z = -23$
$-2x - 5y + z = -9$
$y - z = 3$

4) Which system of linear equations is represented by the matrix equation: (then solve)

$$\begin{bmatrix} 2 & 5 \\ 7 & -4 \end{bmatrix} \begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} 35 \\ -28 \end{bmatrix}$$

a) $2x + 5y = 35$
    $7x - 4y = -28$

b) $2x + 5x = 35$
    $7y - 4y = -28$

c) $2x + 7y = 35$
    $5x - 4y = -28$

d) $2 + 5x = 35$
    $7 - 4y = -28$

e) none of these

5) A collection of nickels and quarters amounts to $2.60. There are 16 coins in all. Utilizing matrices, determine how many there are of each coin.

6) A total value of $1 bills and $5 bills in a cash box is $124. There are 8 more $5 bills than $1 bills. Utilizing matrices, determine how many there are of each.

7) Hunter bought a mixture of 20-cent, 35-cent & 50-cent valentines. The number of 20-cent valentines was 1 more than twice the number of 35-cent valentines, and the number of 50-cent valentines was 2 less than the number of 35-cent ones. If he spent $4.20 all together, use matrices to find how many valentines of each kind he bought.