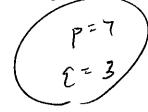
1) Solve using matrix equations





3) Solve using a graphing calculator:

$$4x-3z = -23$$

$$-2x-5y+z = -9$$

$$y-z=3$$

$$Xz-5$$

$$Y=9$$

1) Solve using matrix equations.

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

3) Solve using a graphing calculator:

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

2) Solve using matrix equations.

6.3 Practice

$$4y = 7 - 2x$$

$$6 = 3x - 3y$$

$$Y = .5$$

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

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

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

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

$$7x - 4y = -28$$

e) none of these

6.3 Practice

2) Solve using matrix equations.

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

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

$$z = -23$$

$$5y + z = -9$$

$$= 3$$

$$\begin{bmatrix} 2 & 5 \\ 7 & -4 \end{bmatrix} \begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} 3 \\ -4 \end{bmatrix}$$

$$\begin{bmatrix}
5 \\
-4
\end{bmatrix} \begin{bmatrix}
x \\
y
\end{bmatrix} = \begin{bmatrix}
35 \\
-28
\end{bmatrix}$$
a)
$$2x + 5y = 35$$

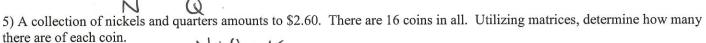
$$7x - 4y = -28$$
b)
$$2x + 5x = 35$$

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

$$5x - 4y = -28$$

d)
$$2+5x = 35$$

 $7-4y = -28$



$$N+Q=16$$

 $5N+15Q=260$ $N=7$
 $Q=9$

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.

$$1 \times +5 y = 124$$
 $\times (1 \text{ dollar}) = 14$ $\times (5 \text{ dollar}) = 22$

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.

$$20x + 35y + 50z = 420$$
 $x(20 cent) = 9$
 $x = 2y + 1$ $y(35 cent) = 4$
 $z = y - Z$ $z = (50 cent) = Z$

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.