Name: _____

Solving Linear Equations

Exercise 1: Suppose that A is the matrix:

$$A=\begin{bmatrix}3 & 1\\ 2 & 1\end{bmatrix}$$

Compute p(A) where p(x) is given by:

1) $p(x)=x-3$
2) $p(x)=2x^2-x+4$
3) $p(x)=x^3-2x+4$
4) $p(x)=x^2-4x+1$

Exercise 2: Solve the system of equations

1) $\begin{cases}x+y=-2\\ y=\frac{3}{2}x+2\end{cases}$

2) $\begin{cases}3x+4y=-12\\ y=\frac{5}{7}x+4\end{cases}$

3) $\begin{cases}3x+4y=-5\\ y+\frac{3}{2}x=9\end{cases}$

4) $\begin{cases}-5x+3y=-4\\ \frac{1}{2}y-\frac{3}{2}x=3\end{cases}$

5) $\begin{cases}-2x+5y=13\\ 3y=9x-3\end{cases}$