**Adding, Subtracting, and Multiplying Polynomials**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Vocabulary**

* Monomial:
* Binomial:
* Trinomial:
* Polynomial:

**Examples**

1. Add the following polynomials
	1. $\left(3x^{2}+4x+5\right)+\left(4x^{2}+x-4\right)$
	2. $\left(2x^{2}+8x-4\right)+\left(x^{2}-3x-1\right)$
2. Subtract the following polynomials
	1. $\left(3x^{2}+4x+5\right)-\left(4x^{2}+x-4\right)$
	2. $\left(2x^{2}+8x-4\right)-\left(x^{2}-3x-1\right)$
3. Multiply the following polynomials
	1. (x+2)(x-3)
	2. (x+4)(x-6)
	3. (x-3)(x2+4x-2)

**Independent Practice**

1. Add the following polynomials
	1. $\left(4x^{2}-x+7\right)+\left(6x^{2}+8x-6\right)$
	2. $\left(-x^{2}+3x+1\right)+\left(-2x^{2}+4x-4\right)$
2. Subtract the following polynomials
	1. $\left(4x^{2}-x+7\right)-\left(6x^{2}+8x-6\right)$
	2. $\left(-x^{2}+3x+1\right)-\left(-2x^{2}+4x-4\right)$
3. Multiply the following polynomials
	1. (x-1)(x+9)
	2. (x-5)(x-6)
	3. (x+2)(x2-3x+7)