Unit 1 : Algebra Skills
Topic: Factoring Expressions Completely
Objective: SWBAT completely factor various expressions by using their knowledge of algebra.

Warm Up #4:

Factor each of the following:

a) $x^4 - x^2 - 6$	b) $\frac{1}{9}x^2 - \frac{2}{3}x + 1$

It is extremely important that you are able to factor expressions that contain multiple variables and various functions including trigonometric (Unit 3), exponential, and logarithmic (Unit 2).

We have already looked at factoring using the greatest common factor and the difference of two squares. Now, let's look at factoring trinomials and other expressions.

After you have removed the GCF from a polynomial you may have to continue factoring

using a method called _____.

Examples:

a) $4d^2 - 4d + 1$

b) $m^2 - mv - 56v^2$

c) $3x^2 - 9xy - 18xz + 54yz$

Problem Set #4: Factor each of the following expressions using the appropriate method.

1) $9x^3 + 39x^2 - 30x$	2) $ky^2 + 2y - 8 - 4ky$

3) $x^3 - 4x - x^2 + 4$

4) $4xy^2 - 15xy + 11x$

5) $a^2b^2 + ab - 6$

6) $2x^4 + 7x^3 - 15x^2$

7) $3p(2q - p) - 2q(p - 2q)$

8) $3ab - b - 4 + 12a$

9) $4x^2 + 4xy + y^2$

10) $2ac - 2ad + bc - bd$

11) $3x^3 + 8x^2 - 15x - 40$

12) $18x^2 + 9xz + z^2$

13) $9x^2 + 21x - 8$

14) $12x - 9x^2 - 4$

15) $20m^2 + 13mn + 2n^2$

16) $12x^3 - 21x^2 + 8xy - 14y$

Homework

<u>Assignment(s)</u>: Finish problems #1-16
Study for Quiz Tomorrow!!