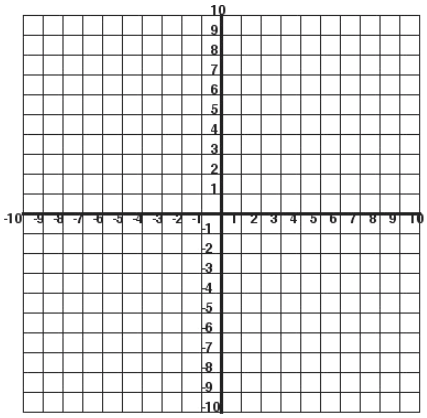
Math A2 Homework: Week of October 22 - 26

Monday 10/22

1. Factor Completely:
   a. $3x^2 + 6x - 45$ b. $3x^3 - 75x$ c. $4 - 100x^2$
   d. $2x^2 - 16x + 32$ e. $18x^2 - 8$ f. $2x^5 - 6x^4 - 8x^3$
2. Factor using GCF, DOTS, or Trinomial
   a. $x^2 - 36$ b. $3x^3 - 9x^2 + 3x$ c. $x^2y^4 + 4x^3y - x^5y^3$
   d. $x^2 + 11x + 28$ e. $25 - 64y^2$ f. $x^2 - 18x + 80$
3. The length of a rectangle is 3 less than twice its width. If the is represented by *w*, what is the perimeter of the rectangle in terms of *w*? What is the area in terms of *w*?
4. Solve the following inequality and graph on a number line: $3x + 12 > 6$
5. Subtract $x^2 - 3x + 2$ from $x^2 + 2x - 6$
6. Complete Review Sheet #1, #2

Tuesday 10/24

1. Factor:
   a. $2x^2 + 9x + 4$ b. $3x^2 - 4x - 4$ c. $4x^2 - 7x + 3$
   d. $x^2 - 6x - 16$ e. $4x^2 - 9$ f. $6x - 24$
   g. $2x^2 + 4x + 2$ h. $9 - 9x^2$ i. $5x^2 + 8x - 4$
2. Write in correct scientific notation: 0.000000056
3. Simplify the following:
   a. $\left(x^3\right)^4$ b. $\dfrac{(2x^2)(6x^8)}{x^4}$ c. $13x^0 - (24x)^0$ d. $\dfrac{10x^3 - 15x^2 + 5x}{5x}$
4. Express as a trinomial:
   a. $(2x - 3)(x + 6)$ b. $(2x - 1)^2$
5. Solve for y: $xy - 4b = 3m$
6. Graph the following system of inequalities. Label your solution set S.
   $y < -2x + 1$
   $y \geq \frac{1}{3}x - 4$
7. Complete Review Sheet #3, #4



Wednesday 10/25 – Complete Entire Review Sheet #5-10

Thursday 10/26 – Study for Test tomorrow

Topics Include: Polynomials → Adding Subtracting, Multiplying, Dividing
Laws of Exponents
Factoring → GCF, DOTS, Trinomial with a = 1, a >1
Old Material → Systems of equations

Friday 10/27 – Test Today