Name_____

Date_____

Advanced Algebra

Review #5 for the Final Exam

Note: The Final Exam will consist of Mostly Quarter 3 topics and Trigonometry, Sequence, and Quadratics

Quarter 3: Polynomials (11 questions), Linear Programming (4 questions), Probability(5 questions)

Trigonometry: At least 30 trig questions.

Test is designed to be 90 minutes long. Multiple choice.

Polynomials Review:

Simplify the following rational expressions. Key concept: YOU MUST factor before you can cancel anything out!

1) $\frac{x^2-1x-30}{x^2+2x-15}$	2) $\frac{x^2-2x-24}{x^2+12x+32}$
3) $\frac{x^2+8x-20}{x^2-12x+20}$	4) $\frac{x^3+9x^2+18x}{(x+6)}$

Add the following Rational Fractions. KEY CONCEPT: You must get a common denominator!

$\frac{(x-3)}{2x}+\frac{9x}{6x^2}$	$\frac{(x+8)}{(x-3)}+\frac{(x-5)}{(x-4)}$

Solve the following rational Equations. Key concept: You must get common denominators so you can then only work with the numerators.

$\frac{3}{a-2}=\frac{-5}{a-10}$	$\frac{2x-3}{x+1}=\frac{x+6}{x-2}$
$\frac{2}{x^2-1}-\frac{1}{x-1}=\frac{1}{2}$	$\frac{x+1}{x-3}-\frac{2}{x}=\frac{2x-6}{x-3}$