you will need to know these two **types** of problems...

Problem #1: Solve the (linear) system of equations by graphing. Be sure to label the solution.

$$2x - y = 2$$

$$y = \frac{2}{3}x + 2$$

Problem #2: Solve/graph the (linear) inequality, $2x - 3y < 0$

Exam 1: geometry (area & perimeter/circumference) formulas & **percent**; **distributive property**: solve linear equations & inequalities in one variable

(slope) $m = \dfrac{y_2 - y_1}{x_2 - x_1}$, $y = mx + b$ & $Ax + By = C$; graph linear equations & inequalities in two variables;

Exam 2: solve a system of linear equations by graphing, substitution and/or elimination methods; exponent properties (including scientific notation) & factoring polynomials; simplify exponential & polynomial expressions; solve polynomial equations

Exam 3: ± rational expressions requires a common denominator (**LCD**); solve rational equations; simplify radical expressions (*i.e.*, square/cube roots); solve radical equations; direct *vs* inverse variation; complex numbers (÷ requires the conjugate of "a±b*i*"); simplify complex number expressions; $i = \sqrt{-1} \leftrightarrows i^2 = -1$

Chapter 9: graph a quadratic equation: $y = ax^2 + bx + c$
identify Vertex, any *x*- and/or *y*-intercepts
quadratic formula: if $ax^2 + bx + c = 0$, then

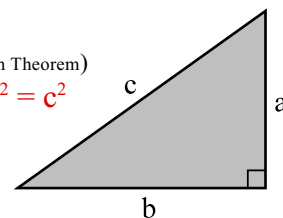$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Other formulas to know...

$I = P \cdot r \cdot t$,
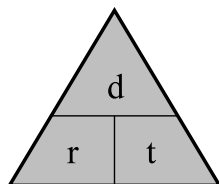
(Pythagorean Theorem)
$a^2 + b^2 = c^2$

The Final Exam consists of 23 problems (five of which are word problems). Be sure to bring a calculator and a straight-edge. Pencil and eraser are recommended (although you may use pen at your own risk of personal peril).