Algebra II Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Passport to Advanced Mathematics Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Hour\_\_\_\_\_\_\_\_\_

Notes #2 NO CALCULATOR

Example 1) Write an expression that is equivalent to 3(2x + 4)(5x+2)

Example2 ) In the equation below, k is a constant. If x = 6, what is the value of k?

$\sqrt{k+2 }$- x = 0

Example 3) Rewrite the following equation for b in terms of x and y.

y = -15x2 + bx + 16.

Example 4) The surface area of a cube is $6(\frac{x}{16})^{2}$, where x is a positive constant. What is the perimeter of one face of the cube?

Example 5) If the expression below is rewritten in the form a + bi, where a and b are real numbers, what is the value of a?

$$\frac{5-i}{1-3i}$$