

Coreq Support for Section 3.1

**Topic 1: Evaluating Algebraic Expressions for a Given Input
(Video: Exponents 0:00 – 7:10)**

Topic 2: Solving Linear Equations of the Form $ax + b = 0$

Topic 3: Solving Quadratic Equations

Recall from section 1.4 that two methods for solving a quadratic equation are factoring and using the square root property.

Topic 4: Solving Linear Inequalities of the Form $ax + b \geq 0$

Topic 5: Simplifying Polynomial Expressions

(Videos: Adding and Subtracting Polynomials; Special Products 0:00 – 8:20)

Polynomials that contain like terms can be simplified by combining the like terms. Like terms are terms that contain exactly the same variables raised to exactly the same powers.

Recall that to square a binomial, the following identities can be used.

$$(a + b)^2 = a^2 + 2ab + b^2$$

$$(a - b)^2 = a^2 - 2ab + b^2$$