Coreq Support for Section 2.1

Topic 1: Adding, Subtracting, Multiplying, and Dividing Fractions

Topic 2: Finding the Average of Two Numbers

The average of a set of values is the sum of all the values divided by the total number of values.

Topic 3: Evaluating Expressions that Contain Exponents

(Video: Exponents 0:00 – 7:10)

Topic 4: Simplifying Square Roots (Video: Simplifying Square Roots)

A square root is simplified when the radicand contains no perfect square factors other than 1. To simplify a square root, we use the product rule for square roots.

Product Rule for Square Roots:

If \sqrt{a} and \sqrt{b} are real numbers, then

$$\sqrt{a \cdot b} = \sqrt{a} \cdot \sqrt{b}$$
.

Topic 5: Solving Linear Equations Involving Fractions

Recall from section 1.1 that to solve a linear equation that contains fractions it is often convenient to clear the equation of fractions by multiplying both sides of the equation by the LCD.

Topic 6: Solving Quadratic Equations

Recall that in section 1.4, we learned three methods of solving a quadratic equation: factoring, using the square root property, and the quadratic formula.

Topic 7: Solving Radical Equations of the Form $\sqrt{x} = c$