

Objective: Adding and Subtracting Radicals

Homework RX2 - NYA p.625 #1 - 15

Do Now: Simplify

1. $4\sqrt{10}$	2. $8\sqrt{36}$	3. 8√ 160

Exam Prep: What is the value of $8x^2 + 3x^2 + x^2$?

A) $11x^2$ B) $11x^6$ C) $12x^2$

D) $12x^{6}$



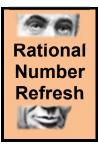
Adding / subtracting Radicals is the same as adding / subtracting variables. You need LIKE TERMS. You do the work with coefficients and keep the "like terms."

Like Terms Addition and Subtraction

Ex 1. $3\sqrt{5} + 2\sqrt{5} =$

Ex 2. $8\sqrt{15} - 14\sqrt{15} =$

1. $2\sqrt{11} + 20\sqrt{11} =$	2. $13\sqrt{x} - 10\sqrt{x} =$	3. $4\sqrt{8} - 3\sqrt{8} =$
4. $3\sqrt{3} + 7\sqrt{3} - \sqrt{3} =$	5. −√14 + 9√14 =	6. $2\sqrt{9} - 2\sqrt{9} =$



- 1. Rational numbers can be written as fractions or are decimals that end or display a pattern.
- 2. Irrational numbers are decimals that show no pattern and do not end. ***All non-perfect squares are irrational.

Unlike Terms Addition and Subtraction

Ex 1. $2\sqrt{5} + 2\sqrt{3} =$

Ex 2. $20\sqrt{3} - 3\sqrt{12} =$

1. $\sqrt{10} + \sqrt{90} =$	2. $30\sqrt{2} - 2\sqrt{8} =$	3. $4\sqrt{8} + 5\sqrt{16} =$
4. $7\sqrt{20} + 2\sqrt{80} =$	$52\sqrt{100} + 3\sqrt{64} =$	6. $\sqrt{75} - 2\sqrt{27} =$