**5.2 – MULTIPLYING AND DIVIDING RADICAL EXPRESSIONS**

**MULTIPLICATION AND DIVISION RULES :**

Examples :



You always need to simplify your result…

**Simplest form of a radical:**

Definition: A radical is in simplest form if:

* There is no square root on the denominator and vice versa.
* no perfect power can be removed from the radicand.

Examples: ; ; aren’t in simplest form…

We have learned in 5.1 how to remove perfect powers from radicands. Now we’re going to learn how to deal with denominator issues.

That is called **rationalizing the denominator.**

The method depends on the number of terms on the denominator…

**RATIONALIZING THE DENOMINATOR :**

**Case # 1 : If there is only 1 term on the denominator**

Examples :



**Case # 2 : If there are 2 terms on the denominator.**

Example :

Definition: Two expressions are called **conjugate expressions** if their product is a difference of squares.   
  
Reminder:   
  
For example : et are conjugates. Et on a :

Examples of applications :



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