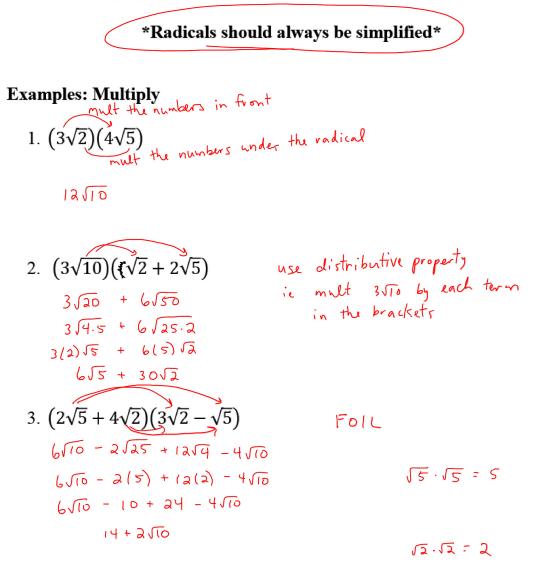
Pre-Calculus 11 Radicals

## Lesson 3 Multiplying Radicals

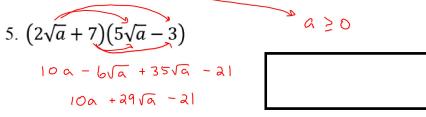
Products of radicals may be expanded using the distributive property and the multiplication property of radicals.



Pre-Calculus 11 Radicals

\*4. 
$$(\sqrt{5} - \sqrt{2})^2$$
  
 $(\sqrt{5} - \sqrt{2})(\sqrt{5} - \sqrt{2})$   
 $5 - \sqrt{10} - \sqrt{10} + 2$   
 $7 - 2\sqrt{10}$ 

Identify the values of the variables for which each expression is defined, then expand and simplify.



$$6. (3\sqrt{x} + \sqrt{y})(3\sqrt{x} - \sqrt{y}) - (\sqrt{x} + 5\sqrt{y})^{2}$$

$$9x - 35xy + 35xy - y - (x + 5\sqrt{xy} + 5\sqrt{xy} + 25y)$$

$$9x - y - (x + 5\sqrt{xy} + 5\sqrt{xy} + 25y)$$

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$$y \ge 0$$

$$y \ge 0$$

$$y \ge 0$$

Assignment: Pg. 126 #3a,d, 4a, 5b, d, 7a, c, 8a, c, e