

13.2 and 13.3 Addition, Subtraction, Multiplication and Division of Radical Expressions

Name_____

Assume that all variables and radicands represent positive real numbers (meaning no absolute value brackets are necessary).

$$5\sqrt{7} - 8\sqrt{11} + \sqrt{7} + 9\sqrt{11}$$

$$9\sqrt{50} - 4\sqrt{2}$$

$$x^2\sqrt{72x} - \sqrt{2x^5} + x\sqrt{50x^3}$$

$$\sqrt{9y+27} + \sqrt{y+3}$$

$$\sqrt{2x}(4\sqrt{7x^3} - 5x\sqrt{25x})$$

$$(8a + \sqrt{5b})(7a - 6\sqrt{5b})$$

$$(4\sqrt{5}+3\sqrt{3})(3\sqrt{5}-4\sqrt{3})$$

$$(4\sqrt{a}+3\sqrt{b})(4\sqrt{a}-3\sqrt{b})$$

$$\sqrt{\frac{7}{6ab^3}}$$

$$\sqrt{\frac{21x^2y}{75xy^5}}$$

$$\frac{2}{8-\sqrt{7}}$$

$$\frac{5\sqrt{3}-\sqrt{11}}{2\sqrt{3}-5\sqrt{2}}$$