

9.1 Operations of Radical Expressions Part Two

conjugates

Examples

1. Simplify.

a. $3\sqrt{7} - 5\sqrt{7} + 12\sqrt{7}$

b. $8\sqrt{5} + \sqrt{125}$

2. Multiply.

a. $\sqrt{12} \cdot \sqrt{3}$

b. $\sqrt{3}(7 + \sqrt{5})$

c. $(1 - \sqrt{3})^2$

d. $(6 - \sqrt{2})(6 + \sqrt{2})$

3. Simplify.

a. $\frac{1}{\sqrt{3}}$

b. $\frac{2\sqrt{5}}{\sqrt{2}}$

c. $\frac{4}{3 + \sqrt{2}}$

4. Operations of cube roots

a. $\sqrt[3]{5(6 - \sqrt[3]{75})}$

b. $\sqrt[3]{32} \times \sqrt[3]{4}$

