

Evaluating Radical Expressions Worksheet

Simplify by adding or subtracting

1) $8\sqrt{64} - \sqrt{96}$

2) $4\sqrt{x} + 6\sqrt{x} + 3\sqrt{x} + 2x$

Simplify by subtracting or multiplying

3) $\sqrt[3]{5a^2} - \sqrt[3]{2a}$

4) $\sqrt[3]{(x+5)^2} \cdot \sqrt[3]{(x+5)^4}$

Simplify and rationalize the denominators

5) $\frac{2 + \sqrt{5}}{6 - \sqrt{3}}$

6) $\frac{\sqrt{7} + \sqrt{5}}{\sqrt{5} + \sqrt{2}}$

7) $\frac{3\sqrt{2} - \sqrt{7}}{4\sqrt{2} + \sqrt{5}}$

Simplify using the quotient property of radicals

8) $\sqrt{\frac{121}{25}}$

9) $\sqrt{\frac{25}{16}}$

10) $\sqrt{\frac{81}{64}}$