

Square Roots Review

1. Be able to reduce a square root to simple radical form.
2. Be able to add and subtract square roots.
3. Be able to multiply square roots.
4. Be able to rationalize the denominator of a square root.

Write each term in simple radical form.

1. $\sqrt{8}$
2. $\sqrt{120}$
3. $\sqrt{3150}$
4. $\sqrt{2156}$

Add or subtract, if possible.

5. $\sqrt{8} + \sqrt{18}$
6. $5\sqrt{27} - \sqrt{75}$
7. $3\sqrt{20} + 2\sqrt{48} - \sqrt{45}$

Multiply. Simplify your answers.

8. $(6\sqrt{7})(2\sqrt{21})$
9. $(3\sqrt{2})(4 - 2\sqrt{6})$
10. $(5 + \sqrt{3})(5 - \sqrt{3})$

Rationalize the denominators.

11. $\frac{7}{\sqrt{2}}$
12. $\frac{15}{2\sqrt{3}}$
13. $\frac{28}{4 + \sqrt{2}}$