

Unit 4 Project

Solve each equation.

1. $\sqrt{b + 15} = \sqrt{3b + 1}$
2. $\sqrt[3]{2w - 1} + 11 = 18$
3. $1 + \sqrt{x + 5} = \sqrt{x + 12}$

Simplify each expression.

4. $\sqrt{175}$
5. $(6 - 3\sqrt{2})(-4 + \sqrt{2})$
6. $2\sqrt{6} + 4\sqrt{24}$
7. $\frac{8}{3 + \sqrt{5}}$
8. $(9^{\frac{1}{2}} \cdot 9^{\frac{2}{3}})^{\frac{1}{6}}$
9. $11^{\frac{1}{2}} \cdot 11^{\frac{7}{3}} \cdot 11^{\frac{1}{6}}$
10. $\sqrt[6]{256s^{11}t^{18}}$