

Perform any operation, simplify, rationalize
denominator

1. $\sqrt{18x^8}$

8. $\frac{2}{3+\sqrt{11}}$

2. $4\sqrt{15x} \cdot 3\sqrt{5}$

9. $\frac{\sqrt{5}}{\sqrt{5}+4}$

3. $6\sqrt{8} - 4\sqrt{2}$

10. $\sqrt[3]{24x^3y^6z^4}$

4. $4\sqrt{63} + 5\sqrt{28}$

11. $\frac{\sqrt{18x^2y^3}}{\sqrt{2y}}$

5. $\sqrt{\frac{3}{5}} \cdot \sqrt{\frac{5}{9}}$

12. $\sqrt[3]{32x} \cdot \sqrt[3]{2x^2y}$

6. $(3 - \sqrt{6})^2$

7. $(\sqrt{2} + 2\sqrt{3})(2 - 2\sqrt{3})$

13. $\sqrt[3]{\frac{3}{25}} \cdot \sqrt[3]{\frac{9}{25}}$