

Simplifying Radicals with Variables

1. $\sqrt{54}$

2. $\sqrt{18}$

3. $-2\sqrt{192}$

4. $\sqrt{121x^2}$

5. $\sqrt{x^8y^{10}}$

6. $\sqrt{a^5b^{11}}$

7. $4a^6b^3\sqrt{28a^9b^3}$

8. $-2a^5bc^3\sqrt{48a^6b^{10}c^4}$

9. $-\sqrt{225a^6b^{10}}$

10. $\sqrt{8} \cdot \sqrt{12}$

11. $7\sqrt{5x} \cdot 3\sqrt{8x}$

12. $-2\sqrt{6a^3} \cdot \sqrt{3a}$