

Practice 11-1 **Simplifying Radicals**

Simplify each radical expression.

1. $\frac{2}{\sqrt{6}}$

2. $\sqrt{80}$

3. $\sqrt{27}$

4. $\frac{\sqrt{256}}{\sqrt{32}}$

5. $\frac{8}{\sqrt{7}}$

6. $\sqrt{160}$

7. $\frac{6}{\sqrt{3}}$

8. $\frac{\sqrt{48n^6}}{\sqrt{6n^3}}$

9. $\sqrt{136}$

10. $\sqrt{\frac{27x^2}{256}}$

11. $\sqrt{\frac{7}{9}}$

12. $\sqrt{\frac{17}{64}}$

13. $\frac{\sqrt{48}}{\sqrt{8}}$

14. $\frac{\sqrt{120}}{\sqrt{10}}$

15. $\frac{5}{\sqrt{2}}$

16. $\sqrt{12 \cdot \sqrt{27}}$

17. $(\sqrt{5})^2$

18. $\sqrt{14} \cdot \sqrt{8}$

19. $(5\sqrt{5})^2$

20. $\sqrt{8x^6y^7}$

21. $4\sqrt{3} \cdot 2\sqrt{2}$

22. $6\sqrt{3} \cdot 7\sqrt{8}$

23. $\frac{10}{\sqrt{x}}$

24. $\frac{\sqrt{9}}{\sqrt{2x}}$

25. $\frac{4}{\sqrt{20}}$

26. $\frac{\sqrt{12x}}{\sqrt{27x}}$

27. $\frac{3\sqrt{7}}{\sqrt{20x}}$

28. $\frac{4\sqrt{5}}{\sqrt{8y}}$