

**Practice B**

For use with pages 511–516

Match the radical expression with its simplified form.

- |                 |                 |                 |                |
|-----------------|-----------------|-----------------|----------------|
| A. $5\sqrt{2}$  | B. $4\sqrt{5}$  | C. $3\sqrt{2}$  | D. $7\sqrt{3}$ |
| E. $4\sqrt{7}$  | F. $6\sqrt{2}$  | G. $6\sqrt{3}$  | H. $5\sqrt{5}$ |
| 1. $\sqrt{108}$ | 2. $\sqrt{72}$  | 3. $\sqrt{147}$ | 4. $\sqrt{80}$ |
| 5. $\sqrt{18}$  | 6. $\sqrt{112}$ | 7. $\sqrt{125}$ | 8. $\sqrt{50}$ |

Use the product property to simplify the expression.

- |                  |                                |                            |                             |
|------------------|--------------------------------|----------------------------|-----------------------------|
| 9. $\sqrt{50}$   | 10. $\sqrt{20}$                | 11. $\sqrt{240}$           | 12. $\sqrt{108}$            |
| 13. $\sqrt{300}$ | 14. $\sqrt{3} \cdot \sqrt{12}$ | 15. $\frac{1}{3}\sqrt{45}$ | 16. $\frac{1}{2}\sqrt{128}$ |

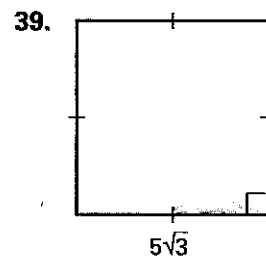
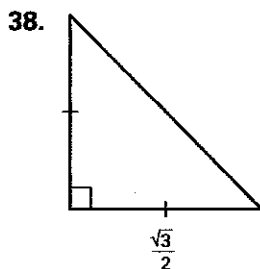
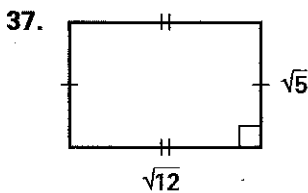
Use the quotient property to simplify the expression.

- |                            |                            |                              |                             |
|----------------------------|----------------------------|------------------------------|-----------------------------|
| 17. $\sqrt{\frac{16}{25}}$ | 18. $\sqrt{\frac{1}{9}}$   | 19. $7\sqrt{\frac{3}{16}}$   | 20. $5\sqrt{\frac{20}{49}}$ |
| 21. $2\sqrt{\frac{15}{3}}$ | 22. $\frac{\sqrt{40}}{14}$ | 23. $10\sqrt{\frac{20}{64}}$ | 24. $\sqrt{\frac{9}{81}}$   |

Simplify the expression.

- |   |                                     |   |   |
|---|-------------------------------------|---|---|
| 25. $\frac{\sqrt{28}}{\sqrt{49}}$               | 26. $\sqrt{\frac{12}{16}}$          | 27. $\frac{\sqrt{64}}{\sqrt{4}}$                | 28. $\frac{\sqrt{9}}{\sqrt{81}}$            |
| 29. $\frac{\sqrt{56}}{\sqrt{36}}$               | 30. $\frac{\sqrt{112}}{\sqrt{100}}$ | 31. $2\sqrt{42} \cdot \sqrt{9}$                 | 32. $\frac{1}{3}\sqrt{18} \cdot \sqrt{3}$   |
| 33. $\sqrt{3} \cdot \frac{\sqrt{20}}{\sqrt{5}}$ | 34. $8\sqrt{27} \cdot \sqrt{72}$    | 35. $\frac{\sqrt{6} \cdot \sqrt{36}}{\sqrt{2}}$ | 36. $\frac{-4 \cdot \sqrt{45}}{\sqrt{144}}$ |

**Geometry** Find the area of the figure. Give both the exact answer in simplified form and the decimal approximation rounded to the nearest hundredth.



Lesson 9.2