

Practice C

For use with pages 511–516

Use the product property to simplify the expression.

1. $\sqrt{80}$ 2. $\sqrt{245}$ 3. $\sqrt{112}$ 4. $\sqrt{288}$
 5. $\sqrt{27} \cdot \sqrt{18}$ 6. $\sqrt{25} \cdot \sqrt{28}$ 7. $\frac{1}{4}\sqrt{80}$ 8. $\frac{2}{3}\sqrt{98}$

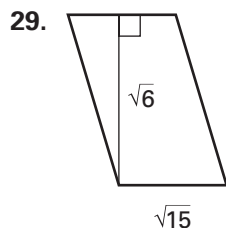
Use the quotient property to simplify the expression.

9. $\sqrt{\frac{25}{100}}$ 10. $\sqrt{\frac{1}{16}}$ 11. $10\sqrt{\frac{5}{36}}$ 12. $21\sqrt{\frac{48}{49}}$
 13. $3\sqrt{\frac{21}{7}}$ 14. $\frac{\sqrt{90}}{33}$ 15. $5\sqrt{\frac{32}{121}}$ 16. $\sqrt{\frac{16}{169}}$

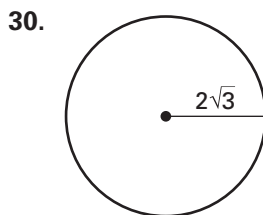
Simplify the expression.

17. $\frac{\sqrt{72}}{\sqrt{64}}$ 18. $\sqrt{\frac{8}{25}}$ 19. $\frac{\sqrt{144}}{\sqrt{9}}$ 20. $\frac{\sqrt{25}}{\sqrt{100}}$
 21. $\frac{\sqrt{63}}{\sqrt{49}}$ 22. $\sqrt{\frac{6}{121}}$ 23. $5\sqrt{105} \cdot \sqrt{16}$ 24. $\frac{1}{5}\sqrt{50} \cdot \sqrt{2}$
 25. $\sqrt{17} \cdot \frac{\sqrt{112}}{\sqrt{7}}$ 26. $8\sqrt{153} \cdot \sqrt{196}$ 27. $\frac{\sqrt{81} \cdot \sqrt{10}}{\sqrt{5}}$ 28. $\frac{-7\sqrt{63}}{\sqrt{256}}$

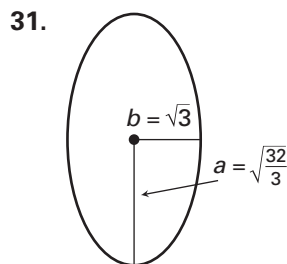
Geometry Find the area of the figure. Give both the exact answer in simplified form and the decimal approximation rounded to the nearest hundredth. For approximations, use $\pi \approx 3.14$.



$$A = bh$$



$$A = \pi r^2$$



$$A = \pi ab$$

32. **Speed** To estimate the speed s of a car involved in an accident, investigators use the formula $s = \frac{11}{2}\sqrt{\frac{3}{4}l}$, where l represents the length in feet of tire skid marks on the pavement. After an accident, an investigator measures skid marks 160 feet long. Approximately how fast was the car traveling?