

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. $\frac{1}{5}\sqrt{50} \cdot \sqrt{2}$

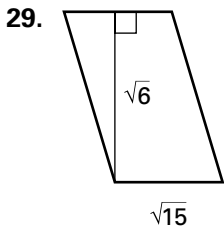
25. $\sqrt{17} \cdot \frac{\sqrt{112}}{\sqrt{7}}$

26. $8\sqrt{153} \cdot \sqrt{196}$

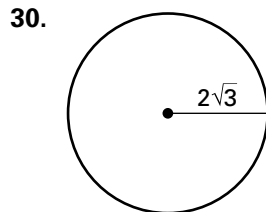
27. $\frac{\sqrt{81} \cdot \sqrt{10}}{\sqrt{5}}$

28. $\frac{-7\sqrt{63}}{\sqrt{256}}$

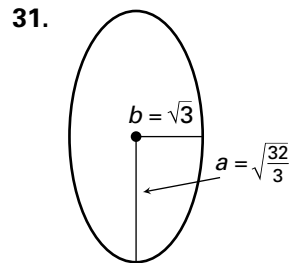
Geometry Find the area of the figure. Give both the exact answer in simplified form and the decimal approximation rounded to the nearest hundredth. For approximations, use $\pi \approx 3.14$.



$A = bh$



$A = \pi r^2$



$A = \pi ab$

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?