

## Practice

**Simplifying Radical Expressions**

*Simplify. Leave in radical form and use absolute value symbols when necessary.*

1.  $\sqrt{20}$

2.  $\sqrt{40}$

3.  $\sqrt{99}$

4.  $\sqrt{108}$

5.  $\sqrt{420}$

6.  $\sqrt{275}$

7.  $\sqrt{640}$

8.  $\sqrt{704}$

9.  $\sqrt{1250}$

10.  $\frac{\sqrt{5}}{\sqrt{3}}$

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

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

13.  $\sqrt{\frac{1}{5}}$

14.  $\sqrt{\frac{5}{32}}$

15.  $\sqrt{5} \cdot \sqrt{60}$

16.  $3\sqrt{5} \cdot \sqrt{5}$

17.  $\sqrt{6} \cdot 4\sqrt{24}$

18.  $11\sqrt{14} \cdot 2\sqrt{7}$

19.  $\sqrt{\frac{3}{4}} \cdot \sqrt{\frac{4}{5}}$

20.  $\sqrt{\frac{1}{7}} \cdot \sqrt{\frac{7}{11}}$

21.  $\sqrt{16b^4}$

22.  $\sqrt{81c^5d^4}$

23.  $\sqrt{124y^6w^7}$

24.  $\sqrt{\frac{18}{x^3}}$

25.  $\frac{3}{5 - \sqrt{2}}$

26.  $\frac{5}{\sqrt{7} + \sqrt{3}}$

27.  $\frac{6x}{5 + \sqrt{x}}$

28.  $\frac{3\sqrt{7}}{-1 - \sqrt{27}}$