

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Per: \_\_\_\_\_

**Simplifying Radical Expressions Using the Multiplication and Division Property**  
**11.2 Practice 1**

Simplify.

1.  $\sqrt{28}$

2.  $\sqrt{68}$

3.  $\sqrt{60}$

4.  $\sqrt{75}$

5.  $\sqrt{162}$

6.  $\sqrt{3} \cdot \sqrt{6}$

7.  $\sqrt{2} \cdot \sqrt{5}$

8.  $\sqrt{5} \cdot \sqrt{10}$

9.  $\sqrt{4a^2}$

10.  $\sqrt{9x^4}$

11.  $\sqrt{300a^4}$

12.  $\sqrt{128c^6}$

13.  $4\sqrt{10} \cdot 3\sqrt{6}$

14.  $\sqrt{3x^2} \cdot 3\sqrt{3x^4}$

15.  $\sqrt{20a^2b^4}$

16.  $\sqrt{100x^3y}$

17.  $\sqrt{24a^4b^2}$

18.  $\sqrt{81x^4y^2}$

19.  $\sqrt{150a^2b^2c}$

20.  $\sqrt{72a^6b^3c^2}$

21.  $\sqrt{45x^2y^5z^8}$

22.  $\sqrt{98x^4y^6z^2}$

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### Simplifying Radical Expressions Using the Multiplication and Division Property 11.2 Practice 1

1.  $\frac{\sqrt{9}}{\sqrt{18}}$

2.  $\frac{\sqrt{8}}{\sqrt{24}}$

3.  $\frac{\sqrt{100}}{\sqrt{121}}$

4.  $\frac{\sqrt{75}}{\sqrt{3}}$

5.  $\frac{8\sqrt{2}}{2\sqrt{8}}$

6.  $\sqrt{\frac{2}{5}} \cdot \sqrt{\frac{6}{5}}$

7.  $\sqrt{\frac{3}{4}} \cdot \sqrt{\frac{5}{2}}$

8.  $\sqrt{\frac{5}{7}} \cdot \sqrt{\frac{2}{5}}$

9.  $\sqrt{\frac{3a^2}{10b^6}}$

10.  $\sqrt{\frac{x^6}{y^4}}$

11.  $\sqrt{\frac{100a^4}{144b^8}}$

12.  $\sqrt{\frac{75b^3c^6}{a^2}}$

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

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