NAME _____ DATE _____ PERIOD _____

Paper Practice 8.6
Operations With Radical Expressions

Simplify.

1. $5\sqrt{12} - 2\sqrt{6} - \sqrt{216}$

2. $9\sqrt{21} - 3\sqrt{21}$

2. $18\sqrt{5w} - 15\sqrt{5w}$

4. $2\sqrt{8} + \sqrt{98} - 5\sqrt{20}$

5. $\sqrt{68} + 7\sqrt{10} - 3\sqrt{17} + \sqrt{40}$

6. $2\sqrt{27} + 5\sqrt{3}$

7. $10\sqrt{11} + 4\sqrt{11}$

8. $\sqrt{60} - 5\sqrt{135}$

9. $\sqrt{3}(\sqrt{6} - \sqrt{15})$

10. $\sqrt{5}(\sqrt{125} + \sqrt{10})$

11. $9\sqrt{7} \cdot 2\sqrt{3}$

12. $7\sqrt{3} \cdot 2\sqrt{3}$

13. A sculpture contains a right triangle with side lengths $5\sqrt{11}$ inches, $12\sqrt{11}$ inches, and $13\sqrt{11}$ inches. What is the perimeter of the triangle? Give your answer as a simplified radical expression.