

Radical Expressions

Name: _____

Date: _____ Per: _____

Topic 1: Simplifying Radicals

Perfect Squares: _____

1. $5\sqrt{112}$

2. $-\sqrt{44a^7b^{16}}$

3. $2\sqrt{108x^9y^2z^{14}}$

4. $\sqrt{189}$

5. $\sqrt{16a^4}$

6. $\sqrt{320m^{15}n^7}$

Topic 2: Adding & Subtracting Radicals

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

8. $\sqrt{72} - \sqrt{18}$

9. $4\sqrt{48} - \sqrt{147} - 3\sqrt{50}$

10. $3\sqrt{5} + 7\sqrt{125} - 2\sqrt{45}$

Topic 3: Multiplying Radicals

11. $5\sqrt{6} \cdot \sqrt{27}$

12. $7\sqrt{10} \cdot -3\sqrt{18}$

13. $\sqrt{5x^2} \cdot \sqrt{8x^3}$