

Simplifying Radical Expressions - Practice Worksheet

Name: _____ Date: _____

Instructions: Simplify each radical expression completely. Show your work step by step. Check your answers using the Answer Key at the end.

1. $\sqrt{50}$

.....

2. $\sqrt{72}$

.....

3. $\sqrt{98}$

.....

4. $3\sqrt{12}$

.....

5. $\sqrt{200}$

.....

6. $2\sqrt{45}$

.....

7. $\sqrt{x^4 \cdot y^3}$

.....

8. $\sqrt{18} + \sqrt{8}$

.....

9. $5 / \sqrt{5}$

.....

10. $\sqrt[3]{54}$

.....

11. $\sqrt{75} - \sqrt{27}$

.....

12. $(2\sqrt{3}) \cdot (4\sqrt{6})$

.....

Answer Key

1. $5\sqrt{2}$

2. $6\sqrt{2}$

3. $7\sqrt{2}$

4. $6\sqrt{3}$

5. $10\sqrt{2}$

6. $6\sqrt{5}$

7. $x^2 \cdot y \cdot \sqrt{y}$

8. $5\sqrt{2}$

9. $\sqrt{5}$

10. $3\sqrt[3]{2}$

11. $2\sqrt{3}$

12. $24\sqrt{2}$