

Simplifying Radicals - Practice Worksheet

Name: _____ Date: _____

Instructions: Simplify each radical completely. Show your factor steps. Write your answer in simplest radical form (no perfect-square factors should remain under the radical sign).

1. Simplify: $\sqrt{16}$

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2. Simplify: $\sqrt{50}$

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3. Simplify: $\sqrt{72}$

.....

4. Simplify: $\sqrt{98}$

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5. Simplify: $\sqrt{48}$

.....

6. Simplify: $\sqrt{200}$

.....

7. Simplify: $\sqrt{180}$

.....

8. Simplify: $\sqrt{x^6}$

.....

9. Simplify: $\sqrt{75x^4}$

.....

10. Simplify: $\sqrt{128y^8}$

.....

Answer Key

1. 4

2. $5\sqrt{2}$

3. $6\sqrt{2}$

4. $7\sqrt{2}$

5. $4\sqrt{3}$

6. $10\sqrt{2}$

7. $6\sqrt{5}$

8. x^3

9. $5x^2\sqrt{3}$

10. $8y^4\sqrt{2}$