

Key

Algebra 2  
6.1-6.5 Review

Simplify. Assume all variables to be non-negative.

1.  $\sqrt{25}$

5

2.  $\sqrt{0.49}$

.7

3.  $\sqrt[3]{-8}$

-2

4.  $-\sqrt[3]{27}$

-3

5.  $\sqrt{81x^2}$

9x

6.  $\sqrt[3]{64x^6}$

4x<sup>2</sup>

7.  $\sqrt[4]{16x^{12}}$

2x<sup>3</sup>

8.  $\sqrt{\frac{9x^4}{36}}$

$\frac{3x^2}{6} = \frac{x^2}{2}$

9.  $\sqrt[3]{125x^6y^9}$

5x<sup>2</sup>y<sup>3</sup>

10.  $\sqrt[3]{9} \cdot \sqrt[3]{3}$

$\sqrt[3]{27}$

3

11.  $\sqrt{8x^2} \cdot \sqrt{2x^2}$

$\sqrt{16x^4}$

4x<sup>2</sup>

12.  $5\sqrt[3]{9y^2} \cdot \sqrt[3]{24y}$

$5\sqrt[3]{216y^3}$

30y

13.  $\sqrt[3]{54x^7}$

$3x^2\sqrt[3]{2x}$

14.  $\sqrt[3]{4} \cdot \sqrt[3]{-2}$

$\sqrt[3]{-8}$

-2

15.  $\frac{\sqrt[3]{81x^5y^3}}{\sqrt[3]{3x^2}}$

$\sqrt[3]{27x^3y^3}$

3xy

