

Algebra II Worksheet #2 Unit 10 Selected Solutions

Evaluate each of the following.

$$1. \quad 36^{\frac{1}{2}} = \sqrt{36} = \mathbf{6}$$

$$3. \quad 125^{\frac{1}{3}} = \sqrt[3]{125} = \mathbf{5}$$

$$5. \quad 25^{\frac{3}{2}} = (\sqrt{25})^3 = 5^3 = \mathbf{125}$$

$$12. \quad \left(\frac{4}{9}\right)^{-\frac{1}{2}} = \left(\frac{9}{4}\right)^{\frac{1}{2}} = \sqrt{\frac{9}{4}} = \frac{\mathbf{3}}{\mathbf{2}}$$

Express each of the following using standard radical form.

$$14. \quad 12^{\frac{1}{2}} = \sqrt{12} = \mathbf{2\sqrt{3}}$$

$$20. \quad \left(\frac{2}{5}\right)^{-\frac{1}{2}} = \left(\frac{5}{2}\right)^{\frac{1}{2}} = \sqrt{\frac{5}{2}} = \sqrt{\frac{10}{4}} = \frac{\sqrt{\mathbf{10}}}{\mathbf{2}}$$