Simplifying Radicals

Properties of Radicals

Product Property of Radicals	
Quotient Property of Radicals	

Examples of Simplifying Radicals

1. $\sqrt{200}$

2. $\sqrt{8}$

3. $\sqrt[4]{81a^8b^5}$

4. $\sqrt[3]{16x^5}$

5. $\sqrt[3]{\dfrac{x^4y^2}{125x}}$

6. $\sqrt{20} - \sqrt{600} - \sqrt{125}$

7. $\sqrt{12} - \sqrt{54} + \sqrt{75}$

8. $\sqrt{32} + \sqrt{98} - \sqrt{50}$

Examples of Rationalizing Denominators

9. $\dfrac{10}{\sqrt{3}}$

10. $\dfrac{5}{\sqrt{2}}$

11. $\dfrac{\sqrt{2}}{\sqrt{3}}$

12. $\dfrac{2\sqrt{5}}{\sqrt{2}}$