
 NAME _____

Module 17 Simplifying Radical Expressions
Lesson 3 Multiplying Radicals



**guided
practice**

Set 1

1. Simplify: $\sqrt[3]{m} \cdot \sqrt[3]{m^2}$ _____
2. Simplify: $\sqrt[3]{24} \cdot \sqrt[3]{8}$ _____
3. Simplify: $\sqrt{6} \cdot \sqrt{18}$ _____
4. Simplify: $\sqrt[3]{6} \cdot \sqrt[3]{4}$ _____

Set 2

Assume that the variables in square root expressions represent nonnegative numbers.

1. Simplify: $\sqrt{3}(\sqrt{15} - \sqrt{18})$ _____
2. Simplify: $\sqrt[3]{2}(\sqrt[3]{4} + \sqrt[3]{32})$ _____
3. Simplify: $\sqrt{x}(\sqrt{2} - \sqrt{x})$ _____
4. Simplify: $\sqrt{12}(\sqrt{2} - \sqrt{8})$ _____

Set 3

1. Simplify: $(\sqrt{7} - \sqrt{3})^2$ _____
2. Simplify: $(\sqrt{2} - 5)(\sqrt{2} + 5)$ _____
3. Simplify: $(\sqrt{5} + \sqrt{7})(\sqrt{2} - \sqrt{3})$ _____
4. Simplify: $(\sqrt{6} - \sqrt{2})(\sqrt{6} - \sqrt{2})$ _____

