

NAME _____

DATE _____

Module 17 Simplifying Radical Expressions
Lesson 3 Multiplying Radicals

**additional
practice**

Simplify each expression.

- | | |
|--|---|
| 1. $\sqrt{6} \cdot \sqrt{7}$ _____ | 2. $\sqrt{72} \cdot \sqrt{2}$ _____ |
| 3. $\sqrt{x} \cdot \sqrt{x^3}$ _____ | 4. $\sqrt{12} \cdot \sqrt{6}$ _____ |
| 5. $\sqrt{2}(\sqrt{7} + \sqrt{18})$ _____ | 6. $\sqrt[3]{3} \cdot \sqrt[3]{9}$ _____ |
| 7. $\sqrt{5}(\sqrt{m} - \sqrt{5})$ _____ | 8. $\sqrt[3]{9} \cdot \sqrt[3]{6}$ _____ |
| 9. $\sqrt{3}(\sqrt{7x^2} + \sqrt{6})$ _____ | 10. $\sqrt[3]{-54} \cdot 4\sqrt[3]{2}$ _____ |
| 11. $\sqrt{2}(\sqrt{2x} + \sqrt{3})$ _____ | 12. $\sqrt[3]{-64} \cdot 2\sqrt[3]{3}$ _____ |
| 13. $\sqrt[3]{16}(\sqrt[3]{4} + \sqrt[3]{2})$ _____ | 14. $\sqrt[3]{5}(\sqrt[3]{50} - \sqrt[3]{3})$ _____ |
| 15. $(\sqrt{7} + \sqrt{2}) \cdot (\sqrt{7} - \sqrt{2})$
_____ | 16. $(\sqrt{7} + \sqrt{5})^2$
_____ |
| 17. $(\sqrt{2} + \sqrt{2a^2})(\sqrt{2} - \sqrt{a})$
_____ | 18. $(\sqrt{8} + \sqrt{2})^2$
_____ |
| 19. $(\sqrt{2} + \sqrt{11}) \cdot (\sqrt{2} - \sqrt{11})$
_____ | 20. $(\sqrt{8} - \sqrt{3})^2$
_____ |



