

## Unit 3.2 Practice Multiply Radicals

Period \_\_\_\_\_

**Simplify.**

1)  $\sqrt{15} \cdot \sqrt{10}$

2)  $\sqrt[4]{45} \cdot \sqrt[4]{9}$

3)  $-4\sqrt{15} \cdot -\sqrt{15}$

4)  $5\sqrt[3]{16} \cdot -5\sqrt[3]{-12}$

5)  $3\sqrt{10}(3 + 3\sqrt{5})$

6)  $3\sqrt{3}(-2\sqrt{5} - 2\sqrt{6})$

7)  $3\sqrt{15}(-4\sqrt{5r} + 2)$

8)  $-\sqrt{10}(-4\sqrt{10k} + 4k^2)$

9)  $3\sqrt{15}(-2\sqrt{10} + 3)$

10)  $2\sqrt{3n}(-3\sqrt{6} + 3n)$

11)  $3\sqrt{6}(5 - \sqrt{2})$

12)  $-5\sqrt{6}(3\sqrt{2b} + 3\sqrt{3b})$

13)  $3\sqrt{5}(5n + 2\sqrt{10})$

14)  $2\sqrt{15b}(4\sqrt{3} + 4)$

15)  $(4\sqrt{5} - 2\sqrt{2})(2\sqrt{5} - 5\sqrt{2})$

16)  $(-2\sqrt{3} - 4\sqrt{5})(-4\sqrt{5} - 4\sqrt{5})$

17)  $(-2\sqrt{5n} - 3)(3\sqrt{5} + 1)$

18)  $(3\sqrt{5x} - \sqrt{3x})(-\sqrt{2x} - \sqrt{3x})$

19)  $(5\sqrt{3x} - 4\sqrt{2})(-\sqrt{3x} + 3\sqrt{2})$

20)  $(3\sqrt{5m} - 2)(5\sqrt{5m} - 5)$

21)  $(2 + 3\sqrt{2})(5 + 3\sqrt{2x})$

22)  $(-\sqrt{5k} - 4)(3\sqrt{5} - 2)$

23)  $(-\sqrt{5v} - 3\sqrt{3v})(3\sqrt{5v} + 5\sqrt{3v})$

24)  $(5\sqrt{3} - 3\sqrt{5v})(-4\sqrt{3v} + 2\sqrt{5})$