

Multiplying Radicals Practice

Date _____ Period _____

Simplify.

1) $\sqrt{15} \cdot 2\sqrt{2}$

2) $-3\sqrt{2} \cdot \sqrt{5}$

3) $\sqrt{2} \cdot -4\sqrt{2}$

4) $\sqrt{5} \cdot \sqrt{2}$

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

6) $\sqrt{15}(\sqrt{5} + 3)$

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

8) $\sqrt{6}(\sqrt{2} + 2)$

9) $\sqrt{3}(-4\sqrt{6} + \sqrt{2})$

10) $-5\sqrt{5}(-2\sqrt{5} + 4)$

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

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

13) $(2 + 2\sqrt{3})(-4 - 5\sqrt{3})$

14) $(\sqrt{5} + \sqrt{2})(\sqrt{2} + 5\sqrt{2})$

Answers to Multiplying Radicals Practice (ID: 1)

1) $2\sqrt{30}$

5) $2\sqrt{6} + 6$

9) $-12\sqrt{2} + \sqrt{6}$

13) $-38 - 18\sqrt{3}$

2) $-3\sqrt{10}$

6) $5\sqrt{3} + 3\sqrt{15}$

10) $50 - 20\sqrt{5}$

14) $6\sqrt{10} + 12$

3) -8

7) $5\sqrt{5} - 4\sqrt{10}$

11) $-25 - 8\sqrt{10}$

4) $\sqrt{10}$

8) $2\sqrt{3} + 2\sqrt{6}$

12) $-1 - \sqrt{6}$