

WS #3: Multiplying and Foiling Radicals

Date_____ Period____

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Simplify.

1) $\sqrt{5}(\sqrt{10} + 2)$

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

3) $4\sqrt{6}(5 + 2\sqrt{2})$

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

5) $2\sqrt{15}(4\sqrt{10} + 5\sqrt{6})$

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

7) $5\sqrt{5}(2 - 3\sqrt{10})$

8) $5\sqrt{5}(\sqrt{10} + 2)$

$$9) (-3\sqrt{3} + 4)(\sqrt{3} + 5)$$

$$10) (\sqrt{5} + 2)(4\sqrt{5} - 1)$$

$$11) (-2 + 4\sqrt{5})(-3 - 4\sqrt{5})$$

$$12) (\sqrt{2} + 4\sqrt{3})(\sqrt{2} + \sqrt{3})$$

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

$$14) (\sqrt{2} + 2)(-4\sqrt{2} - 5)$$

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

$$16) (\sqrt{3} + \sqrt{5})(\sqrt{3} + \sqrt{4})$$