

## Lesson 5.8

Date \_\_\_\_\_ Period \_\_\_\_\_

**Simplify.**

1)  $-4\sqrt{2} \cdot \sqrt{8}$

2)  $\sqrt{12} \cdot \sqrt{9}$

3)  $\sqrt{8} \cdot \sqrt{6}$

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

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

6)  $\sqrt{10}(2 + \sqrt{2})$

7)  $3\sqrt{15}(5\sqrt{6} + 2)$

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

$$9) (\sqrt{5} + \sqrt{2})^2$$

$$10) (-2\sqrt{3} + 4)(\sqrt{3} + 1)$$

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

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

$$13) \frac{\sqrt{8}}{2\sqrt{36}}$$

$$14) \frac{\sqrt{6}}{\sqrt{9}}$$

$$15) \frac{\sqrt{15}}{\sqrt{80}}$$

$$16) \frac{\sqrt{4}}{\sqrt{64}}$$

## Lesson 5.8

Date \_\_\_\_\_ Period \_\_\_\_\_

**Simplify.**

1)  $-4\sqrt{2} \cdot \sqrt{8}$

$-16$

2)  $\sqrt{12} \cdot \sqrt{9}$

$6\sqrt{3}$

3)  $\sqrt{8} \cdot \sqrt{6}$

$4\sqrt{3}$

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

$-2\sqrt{30} + 5\sqrt{5}$

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

$-20\sqrt{2} - 20\sqrt{5}$

6)  $\sqrt{10}(2 + \sqrt{2})$

$2\sqrt{10} + 2\sqrt{5}$

7)  $3\sqrt{15}(5\sqrt{6} + 2)$

$45\sqrt{10} + 6\sqrt{15}$

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

$3 + 5\sqrt{3}$

$$9) (\sqrt{5} + \sqrt{2})^2$$
$$7 + 2\sqrt{10}$$

$$10) (-2\sqrt{3} + 4)(\sqrt{3} + 1)$$
$$-2 + 2\sqrt{3}$$

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

$$12) (-2 + 3\sqrt{5})(5 - 2\sqrt{5})$$
$$-40 + 19\sqrt{5}$$

$$13) \frac{\sqrt{8}}{2\sqrt{36}}$$
$$\frac{\sqrt{2}}{6}$$

$$14) \frac{\sqrt{6}}{\sqrt{9}}$$
$$\frac{\sqrt{6}}{3}$$

$$15) \frac{\sqrt{15}}{\sqrt{80}}$$
$$\frac{\sqrt{3}}{4}$$

$$16) \frac{\sqrt{4}}{\sqrt{64}}$$
$$\frac{1}{4}$$