

For You to Do

1. $4\sqrt{2}$
2. $2\sqrt{23}$
3. $2\sqrt{5}$
4. $30\sqrt{2}$

2. a. 2 b. 2
 c. 3 d. 10
e. 3
f. The number under the radical on the left side of each equation is divisible by a perfect square.

5. A

6. a. 3 b. 1
 c. -5 d. 12
 e. 6

(Scroll down for worksheet answers)

Simplify.

$$1) \sqrt{5} \cdot \sqrt{5}$$
$$5$$

$$2) \sqrt{10} \cdot \sqrt{2}$$
$$2\sqrt{5}$$

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

$$4) \sqrt{20} \cdot \sqrt{10}$$
$$10\sqrt{2}$$

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

$$6) \sqrt{5} \cdot \sqrt{12}$$
$$2\sqrt{15}$$

$$7) 2\sqrt{2} \cdot \sqrt{12}$$
$$4\sqrt{6}$$

$$8) \sqrt{5} \cdot 2\sqrt{2}$$
$$2\sqrt{10}$$

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

$$10) \sqrt{2} \cdot -2\sqrt{5}$$
$$-2\sqrt{10}$$

$$11) \sqrt{6} \cdot -\sqrt{9}$$
$$-3\sqrt{6}$$

$$12) \sqrt{5} \cdot -5\sqrt{5}$$
$$-25$$

Simplify.

$$\begin{array}{l} 1) -5\sqrt{6} - 2\sqrt{6} \\ \quad -7\sqrt{6} \end{array}$$

$$\begin{array}{l} 2) -3\sqrt{5} + 2\sqrt{5} \\ \quad -\sqrt{5} \end{array}$$

$$\begin{array}{l} 3) -4\sqrt{3} + 3\sqrt{3} \\ \quad -\sqrt{3} \end{array}$$

$$\begin{array}{l} 4) -3\sqrt{6} - 4\sqrt{6} \\ \quad -7\sqrt{6} \end{array}$$

$$\begin{array}{l} 5) -4\sqrt{10} + 5\sqrt{10} \\ \quad \sqrt{10} \end{array}$$

$$\begin{array}{l} 6) -\sqrt{6} - 2\sqrt{6} \\ \quad -3\sqrt{6} \end{array}$$

$$\begin{array}{l} 7) -\sqrt{7} - 5\sqrt{7} \\ \quad -6\sqrt{7} \end{array}$$

$$\begin{array}{l} 8) -\sqrt{10} - 5\sqrt{10} \\ \quad -6\sqrt{10} \end{array}$$

$$\begin{array}{l} 9) -3\sqrt{24} - 3\sqrt{2} + 2\sqrt{2} \\ \quad -6\sqrt{6} - \sqrt{2} \end{array}$$

$$\begin{array}{l} 10) -3\sqrt{45} - \sqrt{5} + 2\sqrt{2} \\ \quad -10\sqrt{5} + 2\sqrt{2} \end{array}$$