

Multiplying Square Roots

Simplify.

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

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

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

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

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

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

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

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

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

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

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

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

13) $\sqrt{15}(\sqrt{3} + 2)$

14) $\sqrt{6}(\sqrt{2} + \sqrt{3})$

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

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

17) $\sqrt{5}(5 + \sqrt{5})$

18) $\sqrt{15}(\sqrt{3} + \sqrt{10})$

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

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

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

22) $3\sqrt{6}(\sqrt{10} - \sqrt{3})$

23) $-4\sqrt{5}(4 - 3\sqrt{10})$

24) $\sqrt{5}(-4\sqrt{6} + \sqrt{10})$

Multiplying Square Roots

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

$$13) \sqrt{15}(\sqrt{3} + 2)$$
$$3\sqrt{5} + 2\sqrt{15}$$

$$14) \sqrt{6}(\sqrt{2} + \sqrt{3})$$
$$2\sqrt{3} + 3\sqrt{2}$$

$$15) \sqrt{10}(\sqrt{10} + 2)$$
$$10 + 2\sqrt{10}$$

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

$$17) \sqrt{5}(5 + \sqrt{5})$$
$$5\sqrt{5} + 5$$

$$18) \sqrt{15}(\sqrt{3} + \sqrt{10})$$
$$3\sqrt{5} + 5\sqrt{6}$$

$$19) -5\sqrt{3}(2 + \sqrt{5})$$
$$-10\sqrt{3} - 5\sqrt{15}$$

$$20) \sqrt{3}(5 + \sqrt{2})$$
$$5\sqrt{3} + \sqrt{6}$$

$$21) \sqrt{10}(4\sqrt{2} + \sqrt{5})$$
$$8\sqrt{5} + 5\sqrt{2}$$

$$22) 3\sqrt{6}(\sqrt{10} - \sqrt{3})$$
$$6\sqrt{15} - 9\sqrt{2}$$

$$23) -4\sqrt{5}(4 - 3\sqrt{10})$$
$$-16\sqrt{5} + 60\sqrt{2}$$

$$24) \sqrt{5}(-4\sqrt{6} + \sqrt{10})$$
$$-4\sqrt{30} + 5\sqrt{2}$$