

## 7.2 Simplifying Expressions

Complete the statement.

1. The \_\_\_\_\_ of the expression  $x + 3 + (-4x) + (-8)$  are 1 and  $-4$ .
2. The \_\_\_\_\_ of the expression  $-5 + 3x + 11 + (-2x)$  are  $-5$  and 11.

Use the distributive property to write an equivalent expression.

3.  $2(x - y)$

4.  $6(a + 5)$

5.  $3(m - 2)$

6.  $3(x + y)$

7.  $4(a - b)$

8.  $2(n - 5)$

9.  $6(1 + m)$

10.  $2(x - y)$

11.  $4c + 4d$

12.  $7j - 7k$

13.  $4z + 8$

14.  $2a + 2b$

15.  $5n + 5m$

16.  $8y - 8z$

17.  $9n - 9$

18.  $3x - 15$

19.  $2x + 12$

**Simplify the expression.**

**20.**  $x + 3 + 4x$

**21.**  $-7 + 9a - 5 - 2a$

**22.**  $-5 + 14m - 22m + 3$

**23.**  $15w - 25 + 16 + 12w$

**24.**  $8a + 4 - a$

**25.**  $15 + 4x - 7$

**26.**  $-6m - 4 + 9$

**27.**  $6x + 2 - 3x + 4$

**28.**  $6y + 5 - y$

**29.**  $4 - 8b + 9b - 3$

**30.**  $2n - 2 + 3n - 3$

**31.**  $-5 - 11z - 9z + 14$