## Lesson 3.1

## **Enrichment and Extension**

## Matching

Simplify the expressions on the left by using the Distributive Property and combining like terms. Then, match it to an equal expression on the right by connecting the two with a line.

1. 
$$6x + 2x$$

**2.** 
$$14x - 12 - x - 3$$

3. 
$$-5x + 14 - x - 2$$

**4.** 
$$-3 - 5x - 3x + 11x + 3$$

**5.** 
$$-2(-5-x)+x-x+1$$

**6.** 
$$\frac{1}{2}(12) + 4x - (x-1)$$

7. 
$$6(x^2-2)+1-16+x$$

**8.** 
$$4\left(\frac{1}{2}x+4\right)+1-16+x$$

**9.** 
$$5(x^2 + x)$$

**10.** 
$$x + \left(1 - \frac{1}{2}x\right)$$

**11.** 
$$x^3 + x^2 + x + x - x^2 - x^3$$

**b.** 
$$\frac{1}{2}x + 1$$

**c.** 
$$13x - 15$$

**d.** 
$$2x + 11$$

**f.** 
$$6x^2 + x - 27$$

**h.** 
$$3x + 1$$

i. 
$$3x + 7$$

i. 
$$-6x + 12$$

**k.** 
$$5x^2 + 5x$$

- **12.** Write an expression containing x-terms and constants. The x-terms should combine to 7x and the constants should sum to 13.
- **13.** Write an expression containing  $x^2$ -terms, x-terms and constants. The  $x^2$ -terms should combine to  $-2x^2$  the x-terms should sum to 3x, and the constants should sum to 3.