

**Lesson**  
**3.2**

**Reteach HOMEWORK**

**EXAMPLE** Subtracting a Linear Expression

Find the difference  $(11w + 3) - (5w - 2)$ .

**Vertical method:** Write the expressions vertically, aligning like terms. Then subtract by adding the opposite of each term in the second expression.

$$\begin{array}{r} 11w + 3 \\ - (5w - 2) \end{array} \xrightarrow{\text{Add the opposite.}} \begin{array}{r} 11w + 3 \\ + (-5w) + 2 \\ \hline 6w + 5 \end{array}$$

**Horizontal method:** Group like terms using properties of operations and simplify.

$$\begin{aligned} (11w + 3) - (5w - 2) &= (11w + 3) + (-5w + 2) && \text{Add the opposite.} \\ &= 11w + (-5w) + 3 + 2 && \text{Commutative Property of Addition} \\ &= 6w + 5 && \text{Combine like terms.} \end{aligned}$$

Find the sum.

1.  $(2a - 3) + (5a - 6)$

$7a - 9$

3.  $(8 - k) + (4 + 3k)$

$12 + 2k$

5.  $(5.7t + 1.9) + (2.6t + 4.1)$

$8.3t + 6$

2.  $(7q + 1) + (9q - 13)$

$16q - 12$

4.  $(12x - 2) + (7x - 1)$

$19x - 3$

6.  $(\frac{3}{4}c - 8) + (\frac{1}{2}c + 5)$

$1\frac{1}{4}c - 3$

Find the difference.

7.  $(6d - 2) - (3d + 2)$

$3d - 4$

9.  $(5h + 7) - (9h - 6)$

$-4h + 13$

11.  $(8.7y - 3.3) - (7.2y - 4.9)$

$1.5y + 1.6$

8.  $(4 - v) - (11 + 2v)$

$-7 - 3v$

$-3v - 7$

10.  $(10x - 1) - (4x + 5)$

$6x - 6$

12.  $(\frac{2}{5}f + 12) - (\frac{3}{10}f - 9)$

$\frac{1}{10}f + 21$