

**ANSWER KEY** Extra Practice: 4.5 Simplifying Variable Expressions

Simplify each expression.

1)  $-8(5 + 5x) - 3(-3x - 4)$

$$-40 - 40x + 9x + 12$$

$$-31x - 28$$

2)  $-3(b + 1) - 7(b + 1)$

$$-3b - 3 - 7b - 7$$

$$-10b - 10$$

3)  $2(9 - p) - 3(p + 4)$

$$18 - 2p - 3p - 12$$

$$-5p + 6$$

4)  $-10(10x + 3) + 3(x - 9)$

$$-100x - 30 + 3x - 27$$

$$-97x - 57$$

5)  $6(m - 8) - 3(2m - 9)$

$$6m - 48 - 6m + 27$$

$$-21$$

6)  $-7(-10k + 5) - 10(8 + 2k)$

$$70k - 35 - 80 - 20k$$

$$50k - 115$$

7)  $-7(r + 2) - 7(1 - r)$

$$-7r - 14 - 7 + 7r$$

$$-21$$

8)  $9(8p + 6) + 8(1 - 7p)$

$$72p + 54 + 8 - 56p$$

$$16p + 62$$

9)  $3(1 + 10r) + 3(10r + 3)$

$$3 + 30r + 30r + 9$$

$$60r + 12$$

10)  $4(6p - 6) - 5(p - 7)$

$$24p - 24 - 5p + 35$$

$$19p + 11$$