CHAPTER 1

Study Guide: Review

Vocabulary

Complete the sentences below with vocabulary words from the list above. Words may be used more than once.

1. An ___?___ is a statement that two expressions have the same value.
2. ___?___ is another word for "additive inverse."
3. The ___?___ of 3 is 3.

1-1 Variables and Expressions (pp. 6–9)

TEKS 8.14. A, 8.15.A

EXAMPLE

■ **Evaluate $4x + 9y$ for $x = 2$ and $y = 5$.**

$4x + 9y$
$4(2) + 9(5)$ *Substitute 2 for x and 5 for y.*
$8 + 45$ *Multiply.*
53 *Add.*

EXERCISES

Evaluate each expression.

4. $9a + 7b$ for $a = 7$ and $b = 12$
5. $17m - 3n$ for $m = 10$ and $n = 6$
6. $1.5r + 19s$ for $r = 8$ and $s = 14$

1-2 Algebraic Expressions (pp. 10–13)

TEKS 8.2.A, 8.4.A, 8.14. A, 8.15.A

EXAMPLE

■ **Write an algebraic expression for the word phrase "2 less than a number n."**

$n - 2$ *Write as subtraction.*

■ **Write a word phrase for $25 + 13t$.**

25 plus the product of 13 and t

EXERCISES

Write an algebraic expression for each phrase.

7. twice the sum of k and 4
8. 5 more than the product of 4 and t

Write a word phrase for each algebraic expression.

9. $5b - 10$
10. $32 + 23s$
11. $\frac{10}{r} - 12$
12. $16 + \frac{y}{8}$