

## MAIN IDEA

- Evaluate algebraic expressions.

## BUILD YOUR VOCABULARY (pages 2–3)

Algebra is a language of .

A **variable** is a , usually a letter, used to represent a number.

**Algebraic expressions** are combinations of , , and at least one .

To **evaluate** an algebraic expression means to find the  of the expression. You can find the value after you replace the variables with .

## EXAMPLES Evaluate Algebraic Expressions

1 Evaluate  $20 + c$  if  $c = 5$ .

$$20 + c = 20 + \boxed{\phantom{00}} \quad \text{Replace } \boxed{\phantom{00}} \text{ with } \boxed{\phantom{00}}.$$

$$= \boxed{\phantom{00}} \quad \boxed{\phantom{00}}$$

1 Evaluate  $p - q$  if  $p = 14$  and  $q = 13$ .

$$p - q = \boxed{\phantom{00}} - \boxed{\phantom{00}} \quad \text{Replace } p \text{ with } \boxed{\phantom{00}} \text{ and } q \text{ with } \boxed{\phantom{00}}.$$

$$= \boxed{\phantom{00}} \quad \boxed{\phantom{00}}$$

1 Evaluate  $2x + 3$  if  $x = 4$ .

$$2x + 3 = \boxed{\phantom{00}} \quad \text{Replace } \boxed{\phantom{00}} \text{ with } \boxed{\phantom{00}}.$$

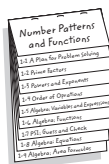
$$= \boxed{\phantom{00}} \quad \boxed{\phantom{00}}$$

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## FOLDABLES

## ORGANIZE IT

On the Lesson 1-5 tab, explain variable and algebraic expression. Then explain what steps you take before evaluating an algebraic expression.



$$3 \cdot 4 = 3 \times 4$$
$$2t = 2 \times t \quad st = s \times t$$

**a.** Evaluate  $m + 9$  if  $m = 25$ .

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**b.** Evaluate  $x - y$  if  $x = 22$  and  $y = 17$ .

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**c.** Evaluate  $7 + 3w$  if  $w = 6$ .

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**4. TEST EXAMPLE** The amount of money Sabrina will need to pay for 5 binders using a \$2 coupon can be represented by the expression  $5x - 2$ , where  $x$  is the cost of each binder. Find the amount of her purchase if each binder is \$4.

**A \$2**

**B \$18**

**C \$20**

**D** \$40

You need to find the value of the expression given  $x = \$4$ .

$5x - 2 =$		Replace		with	
$=$					
$=$					

The amount of Sabrina's purchase is . The answer is

## Page(s):

### Exercises:

**Check Your Progress** **MULTIPLE CHOICE** Find the value of the expression  $5 \cdot 3 + 4g$  if  $g = 2$ .

**F 11**

**G 19**

H 23

J 38

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