#### WARM UP

**■**Page **110** questions **5**, **6**, **7**, and **8**.

# MATH COURSE I

**Expressions** 

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#### VOCABULARY

- variable: a symbol used to represent a quantity about that can change
- <u>constant</u>: a value that does not change
- algebraic expression: an expression that contains at least one variable
- numerical expression: an expression that contains only numbers and operations
- <u>evaluate</u>: to find the value of a numerical or algebraic equation

#### Words in Math

```
+: addition, added to, plus, the sum of, more than,
increased by
-: subtraction, minus, less than, take away, the
difference of, subtracted from, decreased by
x: multiplication, groups of, product, multiplied by,
times
÷: division, divide by, quotient, the ratio of
```

# **Evaluating Expressions**

Step 1: Substitute a number for the variable.

Step 2: Simplify to find the value.

# Example

Evaluate an algebraic expression.

Problem: 5 + y

у	5 + y
8	5 + 8 = 13
9	5+
10	5+

# Example

A rectangle is 4 units wide. What is the area of the rectangle if it is 3, 4, or 5 units long.

Area = length x width

- 1	W	Ixw
3	4	12
4	4	
5	4	

# Write an Expression

Write an expression for the missing value in the table.

What does x represent?

X =

Will's Age	Dan's Age	Expression
2	6	
3	7	
4	8	

# Write an Expression

Write and expression for the area of a figure.

Example: A triangle has a base of 8 inches. Create a table that shows the area of the triangle for different heights. Write the expression.

b	h	Expression
		/Area
8		1/2 · 8 ·
8		1/2 · 8 ·
8		1/2 · 8 ·

Area =  $\frac{1}{2}bh$ 

#### **Practice**

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