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Expressions

1.B.1.a 1.B.1.b

Example

Terrance has 15 more CDs than Philip. Philip has c CDs.

Part A

What expression represents how many CDs Terrance has?

 $15 + c$

Part B

Use what you know about expressions to explain why your answer is correct. Use words, numbers, and/or symbols in your explanation.

Terrance will always have 15 more CDs than Philip, so for any number that Philip may have, Terrance will have $15 + c$.

Example

What is the value of $27x$, if $x = 9$?

- | | |
|--------|---------|
| (A) 3 | (C) 36 |
| (B) 18 | (D) 243 |

Review

An **expression** is a group of numbers and symbols that *expresses* a numerical quantity. It does not contain an equal sign (=).

A **variable** is a letter or symbol that represents an unknown number.

To evaluate an expression, substitute the number that the variable represents for the variable.

When a variable is next to a number, it implies multiplication. (Example: $9x = 9 \times x$)

Thinking It Through

Ask What word tells me which operation to use? “more”

What operation does more indicate? Addition

Assemble Remember that an expression does not have an equal sign. It is not necessary to find the actual number of CDs that Terrance may have.

Thinking It Through

Solve To evaluate this expression, substitute 9 for x :
 $27 \times 9 = 243$, choice D.

Expressions

Directions: Mark the circle with the letter of the best answer.

- 1** What is the value of the following expression?

$$n - 178, \text{ if } n = 227$$

- (A) 49
 - (B) 59
 - (C) 395
 - (D) 405
- 2** A store is having a \$20 off sale on all sweatshirts. Which expression represents the cost of a sweatshirt on sale?
- (F) $20 + s$
 - (G) $20 - s$
 - (H) $s - 20$
 - (J) $20 \div s$



Look for the phrase or words that tell which operation to use.

- 3** What is the value of the following expression?

$$96 \div x, \text{ if } x = 3$$

- (A) 32
 - (B) 93
 - (C) 99
 - (D) 288
- 4** Ibrahim has a part-time job that pays him \$5.75 per hour. Which expression represents how much money Ibrahim can earn?
- (F) $5.75h$
 - (G) $5.75 \div h$
 - (H) $5.75 + h$
 - (J) $h \div 5.75$