LESSON MAKER PRO

# Words Into Math

*Turn descriptions into expressions with x.*

**GRADE 6 · 6.AF.A.15.b**

**6.AF.A.15.b** "Write expressions to represent verbal statements and real-world scenarios."

NAME _____ DATE _____

## BUILD THE EXPRESSION

Let x stand for an amount that can change. Translate each part of the description, and use parentheses when an operation applies to a whole sum or difference.

## WORKED EXAMPLE

You start a game with 4 points and earn 7 points for each badge. Write an expression for your points after earning x badges.

1. Points from badges: 7 times x = 7x.
2. Add the starting points: 7x + 4.

**Answer: 7x + 4**

## PRACTICE 6 problems

**1** Write an expression for 9 more than x.

**ANSWER** _____

**2** Write an expression for 15 less than x.

**ANSWER** _____

**3** Write an expression for 6 times the sum of x and 2.

**ANSWER** _____

**4** Write an expression for the sum of x and 10, divided by 5.

**ANSWER** _____

**5** Write an expression for 3 times x, then subtract 8.

**ANSWER** _____

**6** Write an expression for half the difference between 12 and x.

**ANSWER** _____

## APPLY IT Show your work

**1** A skate park charges 11 dollars per visit. A membership card costs 3 dollars once. Write an expression for the total cost of the card and x visits.

WORK SPACE

**ANSWER** _____

**2** A group of x friends splits an 18-dollar pizza and a 6-dollar delivery fee equally. Write an expression for how much each friend pays.

WORK SPACE

**ANSWER** _____

## CHALLENGE One step up

In a video game, you earn x coins on each of 5 levels. Then you pay a one-time fee of 9 coins. Sam writes 5(x - 9). Write the correct expression and explain Sam's mistake.

WORK SPACE AND ANSWER

**ANSWER KEY** # Words Into Math

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## PART 1 · PRACTICE

| # | PROBLEM | ANSWER |
|---|---|---|
| 1 | Write an expression for 9 more than x. | **x + 9** |
| 2 | Write an expression for 15 less than x. | **x - 15** |
| 3 | Write an expression for 6 times the sum of x and 2. | **6(x + 2)** |
| 4 | Write an expression for the sum of x and 10, divided by 5. | **(x + 10)/5** |
| 5 | Write an expression for 3 times x, then subtract 8. | **3x - 8** |
| 6 | Write an expression for half the difference between 12 and x. | **(12 - x)/2** |

## PART 2 · APPLY IT

1. **11x + 3** Multiply the cost per visit by x, then add the one-time card cost.
2. **(18 + 6)/x** Add the pizza price and delivery fee, then divide the total by the number of friends. Accept 24/x.

## CHALLENGE

**5x - 9. Sam's expression subtracts the fee for every level, but the fee is paid only once.**

Accept equivalent expressions that preserve the order of operations. For the challenge, the explanation must identify that the fee is subtracted once, not once per level.