LESSON MAKER PRO

Expression Action Lab

Use expressions to tell what happens in a situation.

GRADE 5 · 5.NR.5.1

5.NR.5.1 "Write, interpret, and evaluate simple numerical expressions involving whole numbers with or without grouping symbols to represent actual situations."

NAME _____ DATE _____

BUILD THEN SOLVE

An expression uses numbers and operation signs to show what happens in a situation. Work inside parentheses first, then multiply or divide, then add or subtract.

WORKED EXAMPLE

A supply room receives 5 boxes of 14 markers. Then 4 markers are used. Write and evaluate an expression for the markers left.

1. Write: (5 * 14) - 4
2. Multiply: 5 * 14 = 70
3. Subtract: 70 - 4 = 66

Answer: (5 * 14) - 4 = 66 markers

PRACTICE 6 problems

1 Evaluate: 32 + 6 * 7

ANSWER _____

2 Evaluate: (32 + 6) * 7

ANSWER _____

3 A library puts 9 books on each of 8 carts, then adds 13 more books. Write and evaluate an expression for the total number of books.

ANSWER _____

4 A video game store has 63 game cards. It packs 7 bags with 6 cards in each bag. Write and evaluate an expression for the cards left.

ANSWER _____

5 Evaluate: 96 / (8 * 2)

ANSWER _____

6 Which expression represents 72 points shared equally by 9 players after 18 bonus points are added? A. 72 + (18 / 9) B. (72 + 18) / 9 C. 72 - (18 * 9)

ANSWER _____

APPLY IT Show your work

1 At a robotics club, 7 teams build 12 paper bridges each. The club displays 19 extra bridges made during practice. How many bridges are displayed?

WORK SPACE

ANSWER _____

2 A gamer starts with 81 tokens. The gamer spends 6 tokens in each of 9 levels, then earns 27 bonus tokens. How many tokens does the gamer have now?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A game club has 72 prize tickets. It buys 48 more tickets, then divides all the tickets equally among 8 winners. Write an expression and explain why parentheses are needed.

WORK SPACE AND ANSWER

ANSWER KEY

Expression Action Lab

GRADE 5 · 5.NR.5.1

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Evaluate: 32 + 6 * 7	**74**
2	Evaluate: (32 + 6) * 7	**266**
3	A library puts 9 books on each of 8 carts, then adds 13 more books. Write and evaluate an expression for the total number of books.	**(9 * 8) + 13 = 85 books**
4	A video game store has 63 game cards. It packs 7 bags with 6 cards in each bag. Write and evaluate an expression for the cards left.	**63 - (7 * 6) = 21 cards**
5	Evaluate: 96 / (8 * 2)	**6**
6	Which expression represents 72 points shared equally by 9 players after 18 bonus points are added? A. 72 + (18 / 9) B. (72 + 18) / 9 C. 72 - (18 * 9)	**B. (72 + 18) / 9 = 10 points**

PART 2 · APPLY IT

1. **103 bridges** Multiply the bridges built by the teams, then add the extra bridges: 7 * 12 = 84 and 84 + 19 = 103.
2. **54 tokens** Find the tokens spent first: 6 * 9 = 54. Then subtract 54 from 81 and add 27.

CHALLENGE

(72 + 48) / 8 = 15 tickets each. The parentheses show that all 120 tickets are combined before they are divided among 8 winners.

Accept equivalent expressions that keep the same order of operations, such as 9 * 8 + 13 for problem 3. For the challenge, accept a correct explanation that the tickets must be combined before sharing.