

Expression Explorers

Write, read, and solve number expressions.

GRADE 5 • 5.OA.A

CCSS.Math.Content.5.OA.A "Write and interpret numerical expressions."

NAME _____

DATE _____

FOLLOW THE OPERATION CLUES

An expression uses numbers and operation signs to show what to do. Solve inside parentheses, brackets, or braces first. Then multiply or divide from left to right, followed by adding or subtracting from left to right.

WORKED EXAMPLE

Evaluate $(48 \div 6 + 3) \times 7$.

1. $48 \div 6 = 8$

2. $8 + 3 = 11$

3. $11 \times 7 = 77$

Answer: 77

PRACTICE 6 problems

- 1** Write an expression for: Add 9 and 4, then multiply the sum by 5.

ANSWER _____

- 2** Write this expression in words: $8 \times (12 - 5)$.

ANSWER _____

- 3** Evaluate $(18 \div 9) + 4 \times 5$.

ANSWER _____

- 4** Evaluate $24 - [16 \div 4] + 5$.

ANSWER _____

- 5** Write an expression for: Divide 45 by the sum of 4 and 5.

ANSWER _____

- 6** Evaluate $(25 - 9) \div 4 + 8$.

ANSWER _____

APPLY IT Show your work

- 1** Five players each have 12 game coins. Each player spends 4 coins on an upgrade. How many game coins do the players have altogether after the upgrades?

WORK SPACE

ANSWER _____

- 2** Maya divides 40 beads equally among 8 bracelet kits. Then she adds 9 beads to each kit. How many beads are in each kit?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Which expression is greater: $(20 + 10) \times 8$ or $20 + (10 \times 8)$? Explain what each expression does.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Write an expression for: Add 9 and 4, then multiply the sum by 5.	$(9 + 4) \times 5$
2	Write this expression in words: $8 \times (12 - 5)$.	Eight times the difference of 12 and 5.
3	Evaluate $(18 \div 9) + 4 \times 5$.	22
4	Evaluate $24 - [16 \div 4] + 5$.	25
5	Write an expression for: Divide 45 by the sum of 4 and 5.	$45 \div (4 + 5)$
6	Evaluate $(25 - 9) \div 4 + 8$.	12

PART 2 • APPLY IT

- 40 game coins** Write $5 \times (12 - 4)$. Each player has 8 coins left, and $5 \times 8 = 40$.
- 14 beads** Write $(40 \div 8) + 9$. Each kit starts with 5 beads, and $5 + 9 = 14$.

CHALLENGE

$(20 + 10) \times 8$ is greater. It multiplies both addends by 8, while the second expression multiplies only the second addend by 8.

Accept equivalent numerical expressions that preserve the same operations and grouping, even if spacing differs. For interpretation items, accept clear wording that states the operations in the correct order.