LESSON MAKER PRO

Inside the Groups

Follow the grouping symbols to find each value.

GRADE 5 · 5.AT.A.1

5.AT.A.1 "Interpret and evaluate numerical expressions with grouping symbols (e.g. parentheses, brackets, or braces)."

NAME _____ DATE _____

WORK FROM THE INSIDE OUT

Evaluate the innermost group first, then work outward. Within each group, multiply or divide before you add or subtract. Work from left to right when operations have the same priority.

WORKED EXAMPLE

Evaluate [(42 - 14) / 7] + 13.

1. 42 - 14 = 28
2. 28 / 7 = 4
3. 4 + 13 = 17

Answer: 17

PRACTICE 6 problems

1 Evaluate 6 + (8 * 3).

ANSWER _____

2 Evaluate [36 - (10 + 2)] / 3.

ANSWER _____

3 Evaluate 5 * {18 / [2 + 1]}.

ANSWER _____

4 Evaluate 60 / (2 * 5) + 9.

ANSWER _____

5 Evaluate 8 * [20 - (6 + 9)].

ANSWER _____

6 Which is greater, 24 / (2 + 6) or (24 / 2) + 6? Write both values.

ANSWER _____

APPLY IT Show your work

1 A game club earns 8 points for each of 6 puzzles, then spends 12 points on a hint. The club shares the remaining points equally among 3 players. Write and evaluate an expression for each player's points.

WORK SPACE

ANSWER _____

2 A video creator has 30 clips and deletes 6. They put the remaining clips into 4 equal playlists, then add 2 new clips to each playlist. Write and evaluate an expression for the number of clips in each playlist.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Add grouping symbols to 20 - 8 / 2 + 3 so its value is 9. Write the grouped expression and show how you evaluated it.

WORK SPACE AND ANSWER

ANSWER KEY

Inside the Groups

GRADE 5 · 5.AT.A.1

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Evaluate 6 + (8 * 3).	**30**
2	Evaluate [36 - (10 + 2)] / 3.	**8**
3	Evaluate 5 * {18 / [2 + 1]}.	**30**
4	Evaluate 60 / (2 * 5) + 9.	**15**
5	Evaluate 8 * [20 - (6 + 9)].	**40**
6	Which is greater, 24 / (2 + 6) or (24 / 2) + 6? Write both values.	**24 / (2 + 6) = 3; (24 / 2) + 6 = 18. The second expression is greater.**

PART 2 · APPLY IT

1. **(8 * 6 - 12) / 3 = 12 points** The club earns 48 points and has 36 left after buying the hint. Dividing 36 by 3 gives each player 12 points.
2. **(30 - 6) / 4 + 2 = 8 clips** After deleting 6 clips, 24 remain. Each playlist gets 6 of those clips, then 2 more, for a total of 8.

CHALLENGE

(20 - 8) / 2 + 3 = 12 / 2 + 3 = 6 + 3 = 9

Accept parentheses, brackets, or braces when they group the same operations. For the word problems, accept any equivalent expression with the correct value and unit.