LESSON MAKER PRO

Operation Order Quest

Simplify expressions one step at a time.

GRADE 5 · 5.CE.4

5.CE.4 "The student will simplify numerical expressions with whole numbers using the order of operations. Use order of operations to simplify numerical expressions with whole numbers, limited to addition, subtraction, multiplication..."

NAME _____ DATE _____

CHOOSE THE NEXT OPERATION

First, simplify inside parentheses. Then multiply and divide from left to right. Last, add and subtract from left to right.

WORKED EXAMPLE

Simplify 18 + (4 × 3) - 2.

1. Multiply inside the parentheses: 4 × 3 = 12.
2. Rewrite the expression: 18 + 12 - 2.
3. Work left to right: 30 - 2 = 28.

Answer: 28

PRACTICE 6 problems

1 Simplify 35 - 6 × 5.

ANSWER _____

2 Simplify (24 + 16) / 8.

ANSWER _____

3 Simplify 42 / 7 + 9.

ANSWER _____

4 Simplify 9 + 7 × 6 - 5. Name the first, second, and third operations.

ANSWER _____

_____

5 Simplify 48 / (11 - 5) + 6. Name the first, second, and third operations.

ANSWER _____

_____

6 Simplify 7 × 8 - 15 / 5. Name the first, second, and third operations.

ANSWER _____

_____

APPLY IT Show your work

1 A trading card club puts 54 cards equally into 6 binders. Then the club adds 7 new cards to each binder. How many cards are in each binder?

WORK SPACE

ANSWER _____

2 A robotics club has 8 kits with 11 batteries in each kit. The club uses 16 batteries for a test, then shares the remaining batteries equally among 8 robots. How many batteries does each robot get?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Simplify (63 - 15) / 6 + 7 × 5. Then describe the first, second, third, and fourth operations.

WORK SPACE AND ANSWER

ANSWER KEY

Operation Order Quest

GRADE 5 · 5.CE.4

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Simplify 35 - 6 × 5.	**5**
2	Simplify (24 + 16) / 8.	**5**
3	Simplify 42 / 7 + 9.	**15**
4	Simplify 9 + 7 × 6 - 5. Name the first, second, and third operations.	**First: 7 × 6. Second: 9 + 42. Third: 51 - 5. Answer: 46.**
5	Simplify 48 / (11 - 5) + 6. Name the first, second, and third operations.	**First: 11 - 5. Second: 48 / 6. Third: 8 + 6. Answer: 14.**
6	Simplify 7 × 8 - 15 / 5. Name the first, second, and third operations.	**First: 7 × 8. Second: 15 / 5. Third: 56 - 3. Answer: 53.**

PART 2 · APPLY IT

1. **16 cards** Divide 54 by 6 to find the number of cards in each binder first. Then add 7 new cards: 54 / 6 + 7 = 16.
2. **9 batteries** Find the total batteries, subtract the batteries used, then divide equally: (8 × 11 - 16) / 8 = 9.

CHALLENGE

First: 63 - 15. Second: 48 / 6. Third: 7 × 5. Fourth: 8 + 35. Answer: 43.

Accept equivalent wording for the named operations when the order is correct. Students should multiply and divide from left to right when both appear outside parentheses.