

Lesson 6-4 • Group 2

Reinforce Understanding

6.4 Small Group • Group 2

I can write numerical expressions from a real situation and evaluate them using the order of operations, including powers, explain what each part stands for, and build one for a situation I have not seen before.

Worked model

A group buys 4 tickets at \$9 each and 3 programs at \$6 each. Write an expression for the total cost, then find it.

1. Name the parts. tickets: 4 at \$9 programs: 3 at \$6
2. Write a product for each part. 4×9 and 3×6
3. Join them with the operation the story needs. $4 \times 9 + 3 \times 6$
4. Evaluate. $36 + 18 = 54$

Answer: The expression is $4 \times 9 + 3 \times 6$, and the total cost is \$54.

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. Sofia buys 2 member tickets (\$15), 4 non-member tickets (\$20), and 8 student tickets (2^3 dollars). Build the total.

Complete the table. Show how you found each value.

Ticket type	Expression	Cost
Member	2×15	30
Non-member	4×20	
Student	8×2^3	

Show your work

2. Sort each item into the stage of the order of operations where it is handled.

Write the name of the correct group on each line.

Groups: Grouping symbols Exponents Multiply / divide Add / subtract

- _____ ()
- _____ 2^3
- _____ $\times$ and $\div$ left to right
- _____ $+$ and $-$ left to right
- _____ []
- _____ 5^2