



# ORDER OF OPERATIONS

## Math Lib Activity

**Objective:** Students will practice simplifying numerical expressions using the order of operations with this “Math Lib” activity. This includes brackets, parentheses, exponents, multiplication, division, addition, subtraction, and a few with absolute value as well.

There are 9 stations, each with 9 problems. At each station, students choose one expression to simplify, then check their answer on the solution card. Each correct answer provides a piece of the story. After visiting all 9 stations, students will have completed the full story.

### Directions:

- (1) Open the editable solution cards PowerPoint and customize the story elements to fit your students. Print the document.
- (2) Print the student recording worksheet (pages 3–4) and the expressions cards (pages 5–13). I recommend printing the recording worksheet on white paper and using different colors for each station's cards if possible (e.g., Station A on blue, Station B on yellow). Printing everything on white paper works as well.
- (3) Make enough copies of the recording worksheet for each student.
- (4) Cut out the expressions cards and laminate if desired.
- (5) Set up 9 stations around the room. Place the 9 equation cards and the corresponding solution card at each station. Distribute recording worksheets and group students in pairs or small groups of 2–4. Assign each group a starting station.
- (6) Set a timer for 3–4 minutes. At each station, students choose one expression to simplify. After simplifying, they find their answer on the solution card and record the corresponding story piece. When time is up, rotate to the next station. Once all stations are complete, have each group read and share their completed story with the class.

**Optional:** Collect the cards between groups so each group ends up with a unique version of the story.

### SAMPLE OF WHAT STATION A LOOKS LIKE:

The image shows a collection of materials for Station A. On the left, there are several green cards with mathematical expressions. On the right, there is a white solution card titled "STATION A - WHO?".

**STATION A Cards**

- $56 + (3^2 - 19) - 2 - 6$
- $24 - (5 + 3)^2 + 4 - 2^2$
- $6^2 - [11 + 3 \cdot (2 + 4)] + 2^2$
- $(6 - 1)^2 + 24 \div 3 \cdot 7 - 4$
- $24 \div (6 - 2) + 2^3$
- $\frac{6(2 + 4) - 1}{2 \cdot 3 + 1}$
- $\frac{2^2 + 8 + 3}{4 + 3}$
- $\frac{17 \cdot 5 - 3 \cdot 5}{3 - 1}$
- $24 + (3^2 - 7) - 15$

**STATION A - WHO?**

-3	Ms. Walker
-5	Mr. Walker
-8	Ms. Staher
15	Mr. Henson
77	Mr. Jarson
14	Mr. Stuart
5	Mr. Higgins
1	Ms. Collins
7	Ms. Burns