## Go-Math Lesson 1-11

Go Math Lesson 1.11

## Algebra - Evaluate Numerical Expressions

## Learning Target:

I can use order of operations to evaluate (solve) numerical expressions.

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In this lesson we continue to consider math as a language. We will be speaking the language of .....
$\cos \alpha+\cos \beta=2 \cos \frac{a+\beta}{2} \cos \frac{a-\beta}{2} \quad y \uparrow y=\sqrt{x}$


## order of operations

The order of operations is a rule that tells you the sequence to follow when you are performing operations in a mathematical expression.



## "GROUPINGS"

$\{2 x[6 x(4+3)]\}+7$
$\{2 \times[6 \times(4+3)]\}+7$
Step 1: Add $4+3$ Step 2: Multiply $6 \times 7$
Step 3: Multiply $2 \times 42$
Step 4: Add $84+7$

$18 \div 3+4 \times 6$
$18 \div 3+24$

## $6+24$

 30Step 1: Write "PEMDAS" above the equation.

Step 2: Working left-toright, go through each letter performing the function in that order.

Step 3: Rewrite the existing variable underneath until it is completely solved.
5.OA. A. 1 - I can use parenthesis, brackets, or braces to solve numerical expressions.

$12+[(14-6) \div 4]$ $12+[8 \div 4]$ $12+2$ 14

Step 1: Write "PEMDAS" above the equation.

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## $40-5^{2} \div(12-7)$

 $40-5^{2} \div 5$ $40-25 \div 5$ 40-535

Step 1: Write "PEMDAS" above the equation.

Step 2: Working left-toright, go through each letter performing the function in that order.

Step 3: Rewrite the existing variable underneath until it is completely solved.
5.OA. A. 1 - I can use parenthesis, brackets, or braces to solve numerical expressions.


## $16 \div 2+11$ <br> $8+11$

Step 1: Write "PEMDAS" above the equation.

Step 2: Working left-toright, go through each letter performing the function in that order.

Step 3: Rewrite the existing variable underneath until it is completely solved.
5.OA. A.1 - I can use parenthesis, brackets, or braces to solve numerical expressions.

$35-\{4 \times[11-8) \div 2]\}$ $35-\{4 \times[8 \div 2]\}$ $35-\{4 \times 4\}$ 35-16
19

Step 1: Write "PEMDAS" above the equation.

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5.OA. A. 1 - I can use parenthesis, brackets, or braces to solve numerical expressions.

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Your tasks:

1. Complete Google Classroom Lesson 1.11 Check-in
2. Complete Think Central assignments!
3. Watch videos posted on the website
4. Complete IXL Skills for the week

You have a lot to do - Don't waste time!

