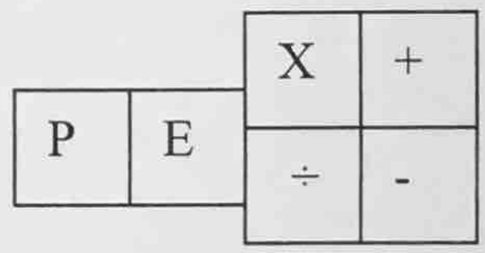
Name: Key Math Period:_____ Date:_____

Guided Notes - Order of Operations

What is a numerical expression?	Only includes number and operation symbols *NO equal sign
What does it mean to simplify?	find an equivalent expression that is simpler than the original
What is the order of operations?	Order of operations is a series of steps to solve numerical expressions. 1. Parentheses 2. Exponents 3. Multiply or Divide from left to right 4. Add or Subtract from left to right
Helpful Hint: The following chart resembles a hopscotch board. It is to remind you that when you land on multiplication/division, or addition/subtraction, both of your legs are touching a box which means that you must do whichever one comes first from left to right.	
$9 + 12 \times 2$ $9 + 24$ 33	33
$4 \times 3^2 + 8 - 16$ $4 \times 9 + 8 - 16$ $36 + 8 - 16$ $44 - 16$ 28	28
$5 + 12 \div 6 - 3$ $5 + 2 - 3$ $7 - 3$ 4	4

Order of Operations

Practice 1: $4^2 + 48 \div (10 - 4)$ $4^2 + 48 \div 6$ $16 + 48 \div 6$ $16 + 8$ 24	24
Practice 2: $81 \div (9 \times 9) + 4^3$ $81 \div 81 + 4^3$ $81 \div 81 + 64$ $1 + 64$ 65	65
Practice 3: $61 + 5 \times 10 \div 2 - 70$ $61 + 50 \div 2 - 70$ $61 + 25 - 70$ $86 - 70$ 16	16
Practice 4: $(2^2 + 18) + 3 - 5 \times 4$ $(4 + 18) + 3 - 5 \times 4$ $22 + 3 - 5 \times 4$ $22 + 3 - 20$ $25 - 20$ 5	5
Practice 5: $21 \div (3 + 4) \times 9 - 2^3$ $21 \div 7 \times 9 - 2^3$ $21 \div 7 \times 9 - 8$ $3 \times 9 - 8$ $27 - 8$ 19	19
Practice 6: Regina bought 5 carved wooden beads for $3 each and 8 glass beads for $2 each. Write and evaluate the expression. $5 \times \$3 + 8 \times \$2$ $15 + 16$ $31	$31
Practice 7: Tyler walked 2 miles a day for the first week of his exercise plan. Then he walked 3 miles for the next nine days. How many miles did Tyler walk? $2 \times 7 + 3 \times 9$ $14 + 27$ 41	41 miles