Name _____

Reteaching
2-3

Order of Operations

Order of operations is a set of rules that mathematicians use when computing numbers. Here is how order of operations is used to solve the following problem: $7 + (5 \times 4) \times 3$.

Order of Operations

First, compute all numbers inside parentheses.	$7 + (5 \times 4) \times 3$ $7 + 20 \times 3$
Next, evaluate terms with exponents. If there are no exponents, go to the next step.	$7 + 20 \times 3$
Then, multiply and divide the numbers from left to right.	$7 + 60$
Finally, add and subtract the numbers from left to right.	67

How to use parentheses to make each sentence true:	$6 + 2 \times 9 = 72$
Using order of operations, $6 + 2 \times 9 = 24$, not 72.	
Place parentheses around $6 + 2$ so that this operation is done first:	$(6 + 2) \times 9 = 72$ $8 \times 9 = 72$

Evaluate each expression.

1. $8 + 7 \times 5 =$ _____

2. $18 - 3 \times 2 =$ _____

3. $3 \times 7 + 3 \times 5 =$ _____

4. $40 \div (2 \times 4) =$ _____

5. $6 \times 3 - 6 \times 2 =$ _____

6. $9 + 2^3 =$ _____

7. $7 + 12 \times 3 - 2 =$ _____

8. $4 \times (5 + 5) \div 20 + 6 =$ _____

9. $4^2 - (3 \times 5) =$ _____

10. $(3 \times 2) + 3^2 =$ _____

11. Reasoning Which operation should be performed *last* in this problem: $3^2 + 7 \times 4$? Why?

_____

Use parentheses to make each sentence true.

12. $0 \times 6 + 9 = 9$ _____

13. $3^2 + 2 \times 2 = 13$ _____