

Name _____

Date _____

4-Step Order of Operations- Guided Lesson Explanation

We process all the problems using the PEMDAS Strategy.

Remember: Multiplication and division are at the same level. When you have multiplication and division in the same problem, process those calculations left to right.

Explanation#1

Step a : $10 - 12 \div (8 - 4) \times 5 + 7$	$= 10 - 12 \div 4 \times 5 + 7$	Parentheses
Step b : $10 - 12 \div 4 \times 5 + 7$	$= 10 - 3 \times 5 + 7$	Division (Left of Multiplication)
Step c : $10 - 3 \times 5 + 7$	$= 10 - 15 + 7$	Multiplication
Step d : $10 - 15 + 7$	$= -5 + 7$	Subtraction (Left of Addition)
Step e : $-5 + 7$	$= 2$	Addition

Explanation#2

Step a : $5 + 8 \times (4 + 5) \div 4 - 3$	$= 5 + 8 \times 9 \div 4 - 3$	Parentheses
Step b : $5 + 8 \times 9 \div 4 - 3$	$= 5 + 72 \div 4 - 3$	Multiplication (Left of Division)
Step c : $5 + 72 \div 4 - 3$	$= 5 + 18 - 3$	Division
Step d : $5 + 18 - 3$	$= 23 - 3$	Addition (Left of Subtraction)
Step e : $23 - 3$	$= 20$	Subtraction

Explanation#3

Step a : $20 - 15 \div (8 - 3) \times 4 + 10$	$= 20 - 15 \div 5 \times 4 + 10$	Parentheses
Step b : $20 - 15 \div 5 \times 4 + 10$	$= 20 - 3 \times 4 + 10$	Division (Left of Multiplication)
Step c : $20 - 3 \times 4 + 10$	$= 20 - 12 + 10$	Multiplication
Step d : $20 - 12 + 10$	$= 8 + 10$	Subtraction (Left of Addition)
Step e : $8 + 10$	$= 18$	Addition

