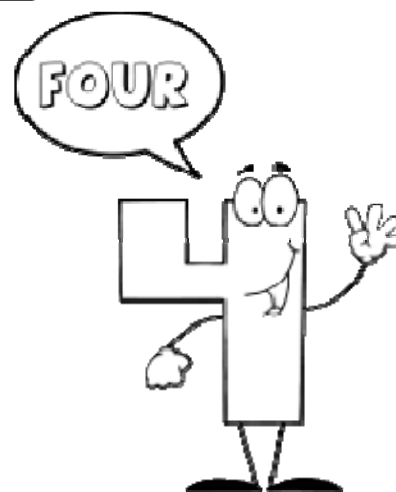Name _____   Date _____

4-Step Order of Operations- Step-by-Step Lesson

Find the end value of the problem.

$$7 + 4 \times (4 + 1) \div 5 - 4$$

Explanation: We need to be reminded about the order in which attack a problem like this. The acronym PEMDAS indicates the order.

We process calculations in this order:

Parentheses, Exponents, (Multiplication, Division), Addition, and Subtraction

Note the parentheses around multiplication and division. That is because those operations are at the same level. When deciding to divide or multiply on a step, we process the calculation to the left first. Division and multiplication is processed left to right.

Step a : $7 + 4 \times (4 + 1) \div 5 - 4 = 7 + 4 \times 5 \div 5 - 4$ Parentheses

Step b : $7 + 4 \times 5 \div 5 - 4$ $= 7 + 20 \div 5 - 4$ Multiplication (Left)

Step c : $7 + 20 \div 5 - 4$ $= 7 + 4 - 4$ Division

Step d : $7 + 4 - 4$ $= 11 - 4$ Addition

Step e: $11 - 4$ $= 7$ Subtraction