

Order of Operations

PEMDAS!

P Parentheses (Grouping symbols { }, [], (), /)

E Exponents (Powers, Square Roots, etc.)

M/D Multiplication & Division (left-to-right) (first come first served)

A/S Addition & Subtraction (left-to-right) (first come first served)

Please Excuse My Dear Aunt Sally

Ex1: $6 \times (5 + 3) = 6 \times 8 = 48$

Parentheses First

Ex2: $5 \times 3^2 = 5 \times 9 = 45$

Exponents before Multiplying

Ex3: $2 + 5 \times 3 = 2 + 15 = 17$

Multiply before Adding

Ex4: $30 \div 5 \times 3 = 6 \times 3 = 18$

Multiply & Divide left-to-right

Ex5: $(5 \times 2^3 + 4) \times 2 \div 11 + (2 - 1 \times 0)$

Parentheses

$= (5 \times 8 + 4) \times 2 \div 11 + (2 - 1 \times 0)$

Exponents

$= (40 + 4) \times 2 \div 11 + (2 - 0)$

Multiplication inside Parentheses

$= 44 \times 2 \div 11 + 2$

Addition/Subtraction inside Parentheses

$= 88 \div 11 + 2$

Multiplication

$= 8 + 2$

Division

$= 10$

Addition