Name:_____ Date:_____
Notes
Algebra Section 1.2
Pages 8-13

Goal: "I will be able to evaluate expressions using Order of Operations."

Order of Operations

- Simplify what is inside the parentheses.
- Raise to Power
- Multiplication or Division, whatever comes first left to right
- Addition or Subtraction, whatever comes first left to right

Example 1: $12 - (\mathbf{7 - 4})^2 + 5 \cdot 2$
P $12 - \mathbf{3^2} + 5 \cdot 2$
E $12 - 9 + \mathbf{5 \cdot 2}$
MD $\mathbf{12 - 9} + 10$
AS $\mathbf{3 + 10}$
AS 13

Example 2: $\frac{3(12-5)}{1+3^2}$ Clear the numerator and denominator before dividing

$\frac{3 \cdot 7}{1+3^2}$

$\frac{3 \cdot 7}{1+9}$

$\frac{21}{1+9}$

$\frac{21}{10} = \mathbf{2\frac{1}{10}}$

Try These:

(a) $5(3 + 4)$ (b) $(6+1)^2$

(c) $5 + 2(4) + 3^2$

(d) $(5 + 1) + 3^2 - (2 + 2)$

(e) $\frac{5 + 3}{10 - 8}$

(f) $\frac{2(3+4)}{(9-8)^2}$

Evaluate each expressions for n=4. Input 4 for n first.

(a) $3n - 5$

(b) $(2n - 3) + 3$

Challenge:

(c) $(2n + 3)^2 - 7$

(d) $\frac{(10-2n)^3}{5n-3^2}$