

1/22/19

Objective: To compute
expressions with integers
using order of operations.

order of operations: The ordering of mathematic
Rules to compute.

Parenthesis () or [] (grouping symbols)

Exponents $\longrightarrow 2^2 = 2 \cdot 2 = 4$ or $2^3 = 2 \cdot 2 \cdot 2 = 8$

Multiplication }
Division } \longrightarrow left to right

Addition }
Subtraction } \longrightarrow left to right

Examples:

1.) $[(5 + 4) \div 3] - (-2)$

$$[9 \div 3] - (-2)$$

$$3 - (-2)$$

$$3 + 2$$

$$\textcircled{5}$$

• work from the inside to
outside.

2.) $4^2 + 8 \cdot 2 - 3$

$$16 + 8 \cdot 2 - 3$$

$$16 + 16 - 3$$

$$32 - 3 = \textcircled{29}$$

$$3.) -4(1+5)^2 \div 6 - (42+5)$$

$$-4(6)^2 \div 6 - 47$$

$$-4(36) \div 6 - 47$$

$$-144 \div 6 - 47$$

$$-24 - 47$$

$$\boxed{-71}$$

$$\begin{array}{r} 24 \\ 47 \\ \hline 71 \end{array}$$

$\boxed{<, >, \leq, \geq, =}$

$$4.) 2^3 + 3 \times 4 \quad \underline{\hspace{2cm}} \quad 1 + (4+5) - 3$$

$$8 + 3 \times 4$$

$$1 + 9 - 3$$

$$8 + 12$$

$$10 - 3$$

$$\boxed{20 > 7}$$