

# October 12, 2016

## Warm-Up



1. Evaluate each of the following:

A.  $-3^4$   
 $-(3 \times 3 \times 3 \times 3)$   
 $-81$

B.  $-2^0$   
 $-1$

C.  $-(-4)^3$   
 $-(-4 \times -4 \times -4)$   
 $64$

D.  $-(-4)^0$   
 $-1$

2. Express each of the following using powers of 10.

$10\ 000 = 10^4$

A. 32 458

B. 500 203

$30\ 000 + 2\ 000 + 400 + 50 + 8$   
 $(3 \times 10^4) + (2 \times 10^3) + (4 \times 10^2) + (5 \times 10^1) + (8 \times 10^0)$

$5 \times 10^5 + 2 \times 10^2 + 3 \times 10^4$

3. Write in standard form

$$4 \times 10^6 + 3 \times 10^3 + 2 \times 10^0 + 1 \times 10^4$$

$$4 \times 10^6 + 1 \times 10^4 + 3 \times 10^3 + 2 \times 10^0$$

$$4\ 013\ 002$$

# Homework Questions???

**20 MINUTES TO COMPLETE THE WORKSHEET....YOU CAN  
USE YOUR SCRIBBLER BUT ONLY GET 20 MINUTES!!!**





# Section 2.3 Orders of Operations with Powers

# BEDMAS



# Orders of operation [BEDMAS]



A.  $-(3 + 4 - 6) \times 5 - (2)$

$$-(1) \times 5 - 2$$

$$-5 - 2$$

$$-7$$

-7

22

B.  $(-5) - [3 - 6 \times 5]$

$$-5 - (3 - 30)$$

$$-5 - (-27)$$

22



Find the solution

BEDMAS



A.  $3^4 + 2^2$   
 $81 + 4$   
 $85$

B.  $3 - 2^3$   
 $3 - 8$   
 $-5$

(A)  
 $(-4)^4$  or (B)  
 ~~$-4^4$~~

C.  $(3 + 2)^3$   
 $(5)^3$   
 $125$

D.  $(5 - 9)^4$   
 $(-4)^4$   
 $256$



What is the answer???

BEDMAS



A.  $[2 \times (-3)^2 - (-6)]^3$

$$[2 \times (-3)^2 - (-6)]^3$$

$$[2 \times 9 - -6]^3$$

$$[18 - -6]^3$$

$$[24]^3$$

$$13824$$

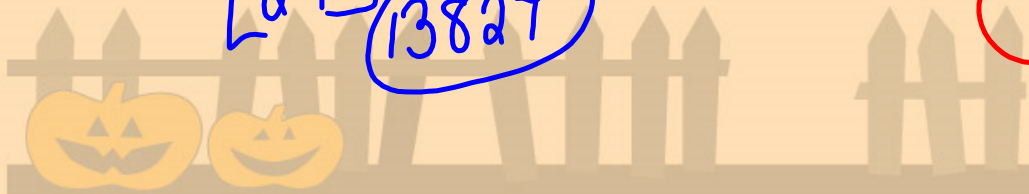
B.  $(18^0 + 5^0)^2 \div (-2)^3$

$$(1+1)^2 \div -8$$

$$(2)^2 \div -8$$

$$4 \div -8$$

$$-0.5$$



Let's Try a few more...



$$\begin{aligned}
 \text{C. } & -3 \times (30 + 4) - 7^2 && -151 \\
 & -3 \times (34) - 49 \\
 & -102 - 49 \\
 & -151
 \end{aligned}$$



$$\begin{aligned}
 \text{D. } & 0 \times 15^2 \times (400 + 21) \div 19^2 + 5 \\
 & 0 \times 225 \times 421 \div 361 + 5 \\
 & 0 \times 421 \div 361 + 5 \\
 & 0 \div 361 + 5 \\
 & 0 + 5 \\
 & \text{5}
 \end{aligned}$$