Today's Plan:

Learning Target (standard): I will use the order of operations to evaluate expressions.

Students will: Complete practice problems over previous concepts at the boards, put up homework problems on the board and make necessary corrections to their own work, take notes over new material and complete practice problems over new concepts.

Teacher will: Provide practice problems over previous concepts, check homework problems for accuracy and provide students feedback, describe and provide examples of new concepts and assign students assessment problems over new concepts.

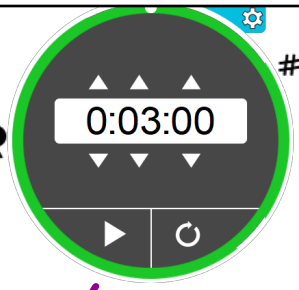
Assessment: Board work, homework check and homework assignment

Differentiation: Students will work at the board, go over and correct homework at their seats, actively engage in lecture over new concepts, practice new concepts with the aid of other students and the teacher and complete homework assignment.

NAME _____ #3

$(4 \cdot 2)^2 = 8^2$

BELL RINGER



1.) Evaluate $(4x)^2$ for $x = 2$.

4

$4(2)^2$ $4(8) = 46$ $8^2 = 64$

2.) Evaluate the expression $16 \div 8 \cdot 3^2$.

$2 \cdot 3^2$ $2 \cdot 9 = 18$

3.) Write k to the fourth power in exponential form.

k^4

1) $x+12$
2) x^3
3) $3+x$
4) $8 \cdot 5$
5) $20-t$
6) $x-10$
7) $9+x$
8) $n-3$
15) 4^3
16) $9+6$
17) $\frac{25}{5}$
18) $22-16$
19) $3+8$
20) $5+10$

Name: Date: HW#

Lesson Variables and Expressions

Objective: Translate algebraic and verbal expressions.

1 the sum of 25 and z $25+z$	2 the difference of a number and 7 $x-7$	3 the product of 16 and the variable p $16 \cdot p$ $16p$
4 49 increased by twice a number m $49+2m$	5 17 and 3 times x $17+3x$	6 14 subtracted from the difference of x and 3 $(x-3)-14$
7 three-fourths the square of a number	8 one-half the cube of m subtracted by 4	9 7p
10 $x^2 \cdot 4$	11 $3(x-8)$	12 $2x \cdot 3x^3$
13 $(x \cdot 5) - 4y$	14 $\frac{5}{x} \cdot 4y$	15 $\frac{x-2}{3} \cdot 7x$

Order of Operations:

- **P** arentheses
- **E** xponents
- **M** ultipication
- **D** ivision

} left to right

- **A** ddition
- **S** ubtraction

} left to right

Evaluate each expression.

$1+3\cdot 3$

$1+9$

10

$3+4-2$

$7-2$

5

Evaluate each expression.

$(6 \cdot 2) \div (4+2)$

$12 \div 6$

2

$(16-6) \div (5-2+2)$

$10 \div (3+2)$

$10 \div 5$

2

Evaluate each expression.

$(4+8) \div (3+5-(4-2))$

$12 \div (3+5-2)$

$12 \div (8-2)$

$12 \div 6$

2

Evaluate each expression.

$(11+1+6-(3+3))\div 3$

$(11+1+6-6)\div 3$

$(12+6-6)\div 3$

$(18-6)\div 3$

$12\div 3$

4

Assignment:

Order of Operations

#1-15

* If you have not submitted your Self-Explaining Picture and/ or Rules paper in GC, please do that by the end of the day! *