

6th Grade Honors: Clear your desk except for...

1. Summer Assignment
2. Homework Policy
3. Spiral notes notebook

Warm-up: Complete in your spiral notebook.

1. $2,215(52)^x$

$$\begin{array}{r} 2215 \\ \times 52 \\ \hline 4430 \\ +110750 \\ \hline 115,180 \end{array}$$
2. $4,500 - 3298$

$$\begin{array}{r} 4500 \\ - 3298 \\ \hline 1202 \end{array}$$
3. $4680 : 22$ divisor | dividend

$$\begin{array}{r} 212.7272 \\ 22 \overline{)4680} \\ \underline{-44} \\ 28 \\ \underline{-22} \\ 60 \\ \underline{-44} \\ 16 \end{array}$$
4. $\frac{7763}{12} \div$

$$\begin{array}{r} 396 \frac{11}{12} \\ 12 \overline{)4763} \\ \underline{-36} \\ 116 \\ \underline{-108} \\ 83 \\ \underline{-72} \\ 11 \end{array}$$

Quotient
 115,180
 Exact *
 repeating bar

Sep 1-11:52 PM

Lessons 1.2-1.4

How are numeric and algebraic expressions evaluated and simplified?

Variable	vs	Constant
A letter or symbol that represents a value. $x, a, \#, \square$		Doesn't change A number $5, 25, 0, -1$

Sep 2-12:00 AM

Evaluate @ Perform all of the operations!
 Simplify

Equation	vs	Expression
Equal → #'s, variables, operations constants		no equal sign #'s, variables, operations
$1 + 2 = x$		$4 + x$
$4m = 10$		$3 + 5m$
*Solve		*Evaluate

Sep 2-12:07 AM

Examples:

- *1. $m - 9$ $m=15$
 *Substitute $15 - 9$
 $\boxed{6}$
2. $8c$ $c=3$
 $8 \cdot 3$ $8(3)$
 $\boxed{24}$
3. k $k=13$
 p $p=24$
 $\boxed{\frac{13}{24}}$

Sep 2-12:08 AM

How do we read it?
 How do we evaluate it?

a^x
 a to the xth power
 base
 Exponent
 Power
 Squared
 Cubed

Ex 1: 3^2
 $3 \cdot 3$
9

Ex 2: $2^3 \cdot 5^2$
 $2 \cdot 2 \cdot 2 \cdot 5 \cdot 5$
200

Sep 2-12:14 AM

Ex 3: y^5 Standard Exponential form
 Ex 4: 9^3
 $9 \cdot 9 \cdot 9$
 $81 \cdot 9$
729

Sep 2-12:15 AM

Order of Operations

☆ **PEMDAS**

☆

1. Perform any operations within grouping symbols.
2. Evaluate exponents.
3. Multiply or divide from left to right.
4. Add or subtract from left to right.

Sep 2-12:18 AM

Evaluate each expression. Show all steps and circle your final answer.

1. $50 - 25 + 5(3)$
 $50 - 25 + 15$
 $25 + 15$
40

2. $3(18 - 7(2))^2$
 $3(18 - 14)^2$
 $3(4)^2$
 $3(16)$
48

Sep 2-12:19 AM

Evaluate each expression. Show all steps and circle your final answer.

3. $120 - 24 \div 4 \times 3 - 1$

$$120 - 6 \times 3 + 1$$

$$120 - 18 + 1$$

$$102 + 1$$

$$\boxed{103}$$

5. $\frac{4^2}{6} \cdot 3 + 66$

$$\frac{64}{6} \cdot 3 + 66$$

$$192 - 66$$

$$\boxed{126}$$

4. $8(6) - (2)$

$$|8(6) - 2|$$

$$\frac{48 - 8}{6^2}$$

$$40$$

$$\frac{40}{36}$$

$$\frac{4}{36} \rightarrow \boxed{\frac{1}{9}}$$

6. $(12 - 3)^2 - 36$

$$(15)^2 - 36$$

$$225 - 36$$

$$\boxed{189}$$

Homework:

p. 11 # 14-23

p. 16 # 13-31

p. 21 # 15-26

Sep 2-12:19 AM

Sep 2-12:24 AM

Sep 2-7:40 AM