

College Prep Algebra
Evaluate Expressions

NAME _____
HOUR _____ DUE DATE _____

Show one line for each of the steps used in the Order of Operations. Do all work on notebook paper (front side only) and attach to the back of this paper. Check answers and correct mistakes.

1.) $-8 - 3(+3)$

2.) $8 - (7 - 9)^3$

3.) $-6 + \frac{24}{-8} - 3$

4.) $\frac{(3-6)^2}{3^2-6^2}$

5.) $6 - (-2) - (4 - 7)^2$

6.) $-2 - 3(7 - 3) - (2 - 8)$

7.) $[3(4)]^2 - 5^2$

8.) $5^2 - 2[3 - 6(-1)]$

9.) $5 - 3[6 - (2 - 3)^3]$

10.) $-2(-3)^2(-1)^3$

11.) $-3(-1)^5 + [3(-2)]^2$

12.) $\left(\frac{-6}{-3} + \frac{12}{-4}\right)^3$

Evaluate the following when..... $x = -2$, $y = 3$, and $z = -4$

Make sure you show the substitution step....place a set of parentheses where the letter was...then place the value of that letter INSIDE the parentheses.... then follow the order of operations rule.

1.) $x - z$

2.) $xy - z$

3.) $x - z^2$

4.) $x - 5(y + z)$

5.) $-x^2$

6.) $|x - z| + y$

7.) $3x + y - z$

8.) $x^2 - 2(x - y)^2$

9.) $-z - x^2 + y^3$

10.) $x^2 - y^2$

11.) $-3x^3$

12.) $\frac{(xyz)}{(x+z)}$