Name:_____

Remediation –PEMDAS

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After you have watched the video from the wiki, you should try the following problems and then use the key to check your work. You should use your calculator to check your work before you use your key, so you have the opportunity to troubleshoot your own work. If you are successful on this worksheet, take the re-evaluation quiz. Be sure to follow the directions there.

Directions: Please simplify the following expressions. Show your work in a line by line fashion. Express any non-integer answers as non-mixed fractions. Do not use decimals. Do not round.

1. $4-3(2-3(4))+(-6)$

$4-3(2-12)-6$

$4-3(-10)-6$

$4+30-6$

$34-6=28$

2. $-6^2-4^2-(-5)^3$

$-36-16-(-125)$

$-52+125$

73

3. $\dfrac{3-5(6)}{(-5)^2-3-3(3)}$

$\dfrac{3-30}{25-3-9}$

$\dfrac{-27}{13}$

4. $5-\dfrac{1}{2}\left(\dfrac{2}{7}-\dfrac{5}{7}\right)-\left(-\dfrac{4}{5}\right)$

$5-\frac{1}{2}\left(\frac{-3}{7}\right)+\frac{4}{5}$

$5+\frac{3}{14}+\frac{4}{5}=\frac{421}{70}$

5. $4-5+6\div6\times5(4)^{(2+3(2))}$

$4-5+6\div6\times5(4)^4$

$4-5+6\div6\times5(256)$

$4-5+1\cdot5(256)$

$4-5+5(256)$

$4-5+1280$

1279

6. $-(5-4(-5))^{1/2}+(-7+1)$

$-(5+20)^{1/2}+(-6)$

$-(25)^{1/2}-6$

$-5-6=-11$

Directions: Please evaluate the following expressions for the given values of the variables. Show your plug in then show your work in a line by line fashion. Express any non-integer answers as non-mixed fractions. Do not use decimals. Do not round.

7. $-x^2-3xy+2y^3 \quad x=4 \quad y=-2$

$-(4)^2-3(4)(-2)+2(-2)^3$

$-16+24+2(-8)$

$-16+24-16$

$-32+24$

-8

8. $\dfrac{a+3b}{a-b} \quad a=\dfrac{1}{2} \quad b=-\dfrac{2}{5}$

$\dfrac{\frac{1}{2}+3\left(-\frac{2}{5}\right)}{\frac{1}{2}-\left(-\frac{2}{5}\right)}$

$\dfrac{\frac{1}{2}-\frac{6}{5}}{\frac{1}{2}+\frac{2}{5}}$

$\dfrac{\frac{5}{10}-\frac{12}{10}}{\frac{5}{10}+\frac{4}{10}}$

$\dfrac{-\frac{7}{10}}{\frac{9}{10}}=\dfrac{-7}{9}$