Lesson Title 1.7 Evaluating Expressions DAY THREE **Bridge to ALG 2** **Date** _____

Evaluating Expressions

Use PEMDAS to simplify in the correct order.

Task 1: Simplify each expression. Show your work.

a) $\frac{(-12)(-3)+3}{-7-(-2)}$ $\frac{36+3}{-5} = \boxed{\frac{39}{-5}}$

b) $\frac{2(-3)^2-20}{-5+4}$ $\frac{2(9)-20}{-1} = \frac{18-20}{-1} = \frac{-2}{-1} = \boxed{2}$

c) $\frac{(-8)(-11)-4}{-9-(-4)}$ $\frac{88-4}{-5} = \boxed{\frac{84}{-5}}$

d) $\frac{3(-2)^3-9}{-6+3}$ $\boxed{11}$ $\frac{3(-8)-9}{-3} = \frac{-24-9}{-3} = \frac{-33}{-3}$

Evaluating an Expression

- *Plug in the values provided to the correct variable.*
- *Then simplify the expression until you have one number/value.*

Task 2: If x = - 2 and y = - 4, evaluate each expression.

a) $5x - y$ $5(-2)-(-4)$ $-10+4$ $\boxed{-6}$

b) $x^4 - y^2$ $(-2)^4-(-4)^2$ $16-16$ $\boxed{0}$

c) $\frac{3x}{2y}$ $\frac{3(-2)}{2(-4)}$ $\frac{-6}{-8} \div \frac{2}{2} = \boxed{\frac{3}{4}}$

Solving Applications That Involve Multiplying or Dividing Numbers

Task 4: Calculating a Total Golf Score

a) A professional golfer finished seven strokes under par (- 7) for each of the three days of a tournament. What was her total score for the tournament?

$3(-7) = \boxed{-21}$

b) A card player had a score of – 13 for each of four games. Find the total score.

$4(-13) = \boxed{-52}$

Task 3: If x = - 5 and y = - 2, evaluate each expression.

a) $7y - x$ $7(-2)-(-5)$ $-14+5$ $\boxed{-9}$

b) $x^2 - y^3$ $(-5)^2-(-2)^3$ $25-(-8)$ $25+8$ $\boxed{33}$

c) $\frac{2x}{3y}$ $\frac{2(-5)}{3(-2)}$ $\frac{-10}{-6} \div \frac{2}{2} = \boxed{\frac{5}{3}}$

Still need help with: