

+25  
Quiz #1

Name Key

Directions: Please show all work since partial credit is give, and answers without the necessary work will receive no credit. Remember, have fun!

1. Find the value of the expression  $4^2[(13+4)-8]$ .

+3 144  $16 \cdot [17-8]$   
 $16 \cdot 9 = 144$

2. Simplify both sides of the inequality, then tell whether the given statement is true or false (please circle one).

+3  $\frac{3+5(4-1)}{2 \cdot 4+1} \geq 3$

2 ≥ 3 TRUE / FALSE

$\frac{3+5 \cdot 3}{8+1} \geq 3$  ,  $\frac{3+15}{9} \geq 3$

$\frac{18}{9} \geq 3$  False

3. Write the word statement "One less than twice a number is 5" as an equation. Use  $x$  as the variable. Then find all solutions from the set  $\{-1, 0, 3, 4\}$ .

+3 Equation:  $2x-1=5$  +3 Solution:  $x=3$

•  $2(-1) - 1 = 5$   
 $-3 = 5$  False

•  $2(3) - 1 = 5$   
 $5 = 5$  True  $\leftarrow$  only solution

•  $2(0) - 1 = 5$   
 $-1 = 5$  False

•  $2(4) - 1 = 5$   
 $7 = 5$  False

+12

+2 4. Simplify  $-|32-2|$ . -30

a/n  $-|30| = -30$

+5 5. Evaluate the expression  $\left(\frac{5}{6}x + \frac{3}{2}y\right)\left(-\frac{1}{3}a\right)$  for  $x=6, y=-4$ , and  $a=3$ .

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$$\left[\frac{5}{6} \cdot 6 + \frac{3}{2} \cdot (-4)\right] \left(-\frac{1}{3} \cdot 3\right)$$

$$[5 - 6](-1) = (-1)(-1) = 1$$

a/n 6. Identify each of the following as an example of the Commutative, Associative, Inverse, Identity, or Distributive property.

+2 a)  $3x + 0 = 3x$

Identity

+2 c)  $-\frac{2}{3}\left(-\frac{3}{2}\right) = 1$

Inverse

+2 b)  $-5 + (3 + 2) = (-5 + 3) + 2$

Associative