

Name:

Period:

KEY

PreAlgebra Quiz Review:**Construct "The Story of x " and Evaluating Expressions**

1. What is the solution to a multiplication problem called? Division? Subtraction? Addition?

Mult \rightarrow productSubtraction \rightarrow DifferenceDivision \rightarrow QuotientAddition \rightarrow Sum

Directions: Write the expression that fits each description.

2. Subtract 21 from 13

$$13 - 21$$

3. Subtract 13 from 21

$$21 - 13$$

4. Divide 6 by 24

$$\frac{6}{24}$$

5. Divide 24 by 6

$$\frac{24}{6}$$

Directions: Evaluate the expression and write the equation that models the truth statement. Then construct "The Story of x ".

- 6.
- $-2(3m - 7)$
- Truth Statement
- $m = 4$

Story of m

$$m = 4$$

$$-2(3m - 7)$$

① Multiply 3 to 4

$$-2(3(4) - 7)$$

② Subtract 7

$$-2(12 - 7)$$

from the product

$$-2(5)$$

③ Multiply -2

$$-10$$

to the difference

④ The solution

$$-2(3m - 7) = -10$$

is -10 when

$$\text{when } m = 4$$

$$m = 4$$

- 7.
- $\frac{8-x}{4} + 13$
- Truth Statement
- $x = -8$

Story of x

$$x = -8$$

$$\frac{8-x}{4} + 13$$

① Subtract -8 from 8

$$\frac{8 - (-8)}{4} + 13$$

② Divide 4 from the difference

$$\frac{16}{4} + 13$$

③ Add 13 to the Quotient

$$4 + 13$$

④ The solution is 17 when $x = -8$

$$17$$

$$\frac{8-x}{4} + 13 = 17$$

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Directions: Evaluate the expression and write the equation that models the truth statement. Then construct "The Story of x ".

8. $2(26 - 2y) + 4.6$ Truth Statement $y = 4.2$

$y = 4.2$	Story of x
$2(26 - 2y) + 4.6$	① Multiply 2 to 4.2
$2(26 - 2(4.2)) + 4.6$	② Subtract the product from 26
$2(26 - 8.4) + 4.6$	③ Multiply 2 to the difference
$2(17.6) + 4.6$	④ Add 4.6 to the product
$35.2 + 4.6$	
39.8	
$2(26 - 2y) + 4.6 = 39.8$	⑤ The solution is 39.8 when $y = 4.2$
When $y = 4.2$	

9. $\frac{1}{4}b - 8$ Truth Statement $b = -20$

$b = -20$	Story of x
$\frac{1}{4}b - 8$	① Multiply $\frac{1}{4}$ to -20
$\frac{1}{4}(-20) - 8$	② Divide -20 by 4
$-\frac{20}{4} - 8$	③ Subtract 8 from -5
$-5 - 8$	④ The solution is -13
-13	
$\frac{1}{4}b - 8 = -13$	
when $b = -20$	