Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Unit 7 Test Review

**Define the following and give an example of each:**

1. *Expression*
2. *Equation*
3. *Inequality*

**Circle the values that provide a solution to the given equation or inequality (there may be more than one):**

1. 4n = 30 + 6 {10, 32, 6, 9} 5. 4c + c ≥ 30 {5, 6, 15, 30}

6. 12 < 3p + 1 {3, 4, 5, 6} 7. e – 3 = 13 {10, 39, 14, 16}

**Solve for the variable. Show your work and don’t forget to check your answer.**

8. 412 = m + 304 9. $\frac{x}{5}$ = 4 + 6 10. 11h – 4h = 15 + 6

11. 10(3) = g + g + 3g 12. 36 = 3m ● 2

**Word Problems Practice:**

13. Cara is *c* year old. Tara is 3 years younger than twice Cara’s age.

 *Write an equation to express Tara’s age:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

 *Determine Tara’s age if Cara is 8 years old:\_\_\_\_\_\_\_\_\_\_\_\_*

14. Olivia had $230 in her bank account this morning. She then babysat and earned *d* dollars for babysitting. After she deposited the money, her bank account had $288.

 *Write an equation to express Olivia’s money:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

 *Determine how much Olivia made babysitting:\_\_\_\_\_\_\_\_\_\_\_\_\_*

**Graph the following inequalities on a number line. Do not forget to label the numbers!**

15. t < 8 16. k ≥ 23

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17. In order to make a profit, the Eagle Scouts need to sell at least 75 boxes of crackers.

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18. You can be no more than 11 years old to order from the children’s menu.

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