**Study Guide Unit 2**

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| **Learning Target:**  8.EE.7b Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms. | * **I can use the properties of real numbers and combine like terms to determine the solution of a linear equation. (R)** | 1. 9(x-5)=54   x=\_\_\_   1. 4n +7(1 + 3n) = −118   n=\_\_\_   1. –(a+9)=4(3-a)=   a=\_\_\_   1. .4(2-q)=.2(q+7)=   q=\_\_\_ |

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| **Learning Target :**  **8.EE.7a** Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form *x* = *a*, *a* = *a*, or *a* = *b* results (where *a* and *b* are different numbers). | * **I can use the properties of real numbers and combine like terms to determine the number of solution of a linear equation. (R)** * **I can give examples of linear equations with one solution, infinitely many solutions, or no solution. (R)** | *Part I.*  *Solve the following equations (show work). Identify which equation results in: one solution, no solution or infinitely many solutions.*  **-**  2(x+1) = 2(x+3)  4x-3x = x  Part II  Fill in the missing terms.  **Solve 6x + 5- 2x = 4 + 4x +1**  First \_\_\_\_\_\_like terms.  6x +5 -2x = 4 +4x +1  4x+5 = 5 + \_\_\_\_  -4x = -\_\_x  5 = 5  The above equation has\_\_\_\_\_solutions. |
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