Name _____   **Date** _____

GEOMETRY NTI DAY 1: Simplifying Expressions and Solving Equations
Simplify the expressions, Solve the equations.
Complete 3 in Each Row. *(You may complete them all for extra credit, but extra credit will only be given if the assignment is completed.)*
Please do your work on this sheet of paper.

1) $10 + v - 3 + v$	2) $-5 + k - 3 - 2k$	3) $x - 6 - 6 + 5x$	4) $1 - 2p - 7 - 4p$	5) $7 - 6u - 5u - 29$
6) $1 - 2p - 7 - 4p = -30$	7) $-126 = -11 - 21n - 10$	8) $3w + 2w - 1 = 19$	9) $x - 6 - 6 = 15$	10) $9m + 35 - 4m = 0$
11) $-4y - 8 + 7 - 3y = 48$	12) $-6a + 4 - 9 + 2a + 5$	13) $5c + 2 + 34c - 21 - 18c$	14) $5g + 9 - g = -23$	15) $1 = 7r - 8r - 20$
16) $-11 - 21n - 10 + 126$	17) $2 = 5c + 2 + 34c - 21 - 18c$	18) $r + 14 - 8r = 56$	19) $-6a + 4 - 9 + 2a + 5 = 0$	20) $3w + 2w - 1 + 19$
21) $11p + 16 - 2p = 7$	22) $-40 + 6x - 4(8 - 3x) - 2x$	23) $10 - f + 5f = -34$	24) $6(5 - r) - 7r - 3(5r + 6)$	25) $9k = 4k - 35$

DO NOT SOVLE THE FOLLOWING EQUATIONS!!!   *Determine whether each statement is TRUE or FALSE.*
Prove your answer by using substitution(aka-"Plug it in")   WORK MUST BE SHOWN TO GET CREDIT FOR YOUR ANSWER!!!

26)   −6 is a solution
     for the equation
     $4k + 1 - 6 = -17$.

27)   −4 is a solution
     for the equation
     $6 - b - b = -2$.

28)   −8 is a solution
     for the equation
     $-1 = 16 + 2n - 4 - 5 - n$.

FIND THE MISTAKE
Below are 2 equations that have been solved, step-by-step.
Each of them contains one mistake. Find the mistake and circle it

29) $-4n - 2n = -12$

$$\frac{-6n}{6} = \frac{-12}{6}$$

$$n = -2$$

30) $-16 - 1 + 5r - 4r + r = -5$

$$-15 + 2r = -5$$

$$\underline{+15 \qquad\quad +15}$$

$$\frac{2r}{2} = \frac{10}{2}$$

$$r = 5$$