**ML #2- SOLVING MULTI-STEP INEQUALITIES (Unit 3- Math 7 PLUS )**

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| Solve and graph  1) -13n - 3 + 10n > 9 2) 40 < 5(-7 + 3x)    3) 15b + 6 > 9b - 36 4) 2(n − 5) ≥ 30 − 8n |
| **Steps for Solving Multi-Step Inequalities**  1) Use subtraction rules  2) Get rid of parentheses/use distributive property  3) Simplify both sides of the inequality by combining like terms  4) Get variables to one side and constants to the other side  5) Solve the inequality  6) Check solution in the original inequality  REMEMBER: When you multiply or divide by a negative number the inequality sign reverses (flips / switches) |
| **WORD PROBLEMS**  **Write the inequality for the word problem and solve and graph.**   1. You want to buy one news paper for $3, a souvenir for $13, and several candy bars for $2 each. What solution set would represent the number of candy bars you can buy if you only have $32? 2. The school Band needs a banner to carry in the parade. The banner committee decides that the length of the banner should be 18 feet. What are the possible widths of the banner if they can use no more than 48 feet of trim? |

Practice for ML #2 – Inequalities (Math 7+)

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| **Solve, Graph and Check the inequality.**  1) -12k + 28 < 18k + 88 2) 11 + 2c ≤ 6 - 3c  3) -6 + k + 3k < 6 4) 6x - 6 ≤ 8(x + 1)  5) -3(x - 2) ≥ 3x - 17 + 5 6) -8 + 2c + 3 < -5c + 2 |
| **WORD PROBLEMS: Write the inequality for the word problem and solve and graph.**   1. 14 times a number, plus 5 is less than 11 times the same number, minus 19? What is the solution set for the number? 2. Edith is counting the number of seeds in her fruit. Her pomegranate has one less than three times as many seeds as her apple. Her orange has thirteen less than five times as many seeds as her apple. If her pomegranate has more seeds than her orange, how many seeds are there in Edith's apple? |