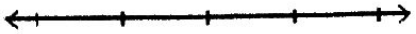
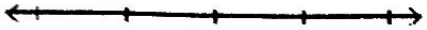
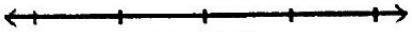
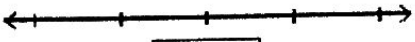
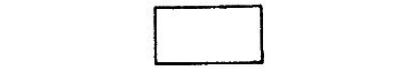
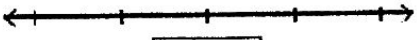
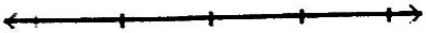
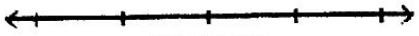
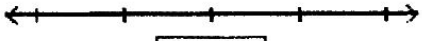
Multi-Step Inequality Practice Puzzle

Solve each of the inequalities below. Put your number solution in the box below each number line, and shade in the appropriate direction. Circle the letter above the arrow that you shaded towards. In the puzzle answer at the bottom of this page, fill in the circled letter into the boxes above your number solution.

$2(x-2) \leq -6$ $2x - 4 \leq -6$ $+4 \quad +4$ $\frac{2x}{2} \leq \frac{-2}{2}$ $x \leq -1$ W K  -1	$5 - 2x \leq 15$ F B 	$2x - 6 - 4x < -8$ S E 
$\frac{x}{4} + 7 \geq 5$ P I 	$5x + 15 - 6x > 19$ T R 	$\frac{x}{3} - 2 < 2$ M T 
$\frac{x}{4} - 9 > 5$ R A 	$2(-4 + x) \geq 28$ E H 	$-7 + \frac{x}{2} \geq -4$ T S 
$10 - 3x + (-19) > 9$ G N 	$-10 - 7x + 9x \leq 8$ O A 	$3(x-6) > -18$ T Y 

Which weighs more? A pound of gold or a pound of feathers?

								W						
-4	18	1	0	-5	9	-4	18	-1	1	-8	-6	18		
							!!							
-4	18	1		6	56	12	1							

Name:_____ Date:_____ Core:_____

Practice – Inequalities Word Problems

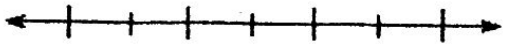
Define a variable (V), write an inequality (I), solve (S) the inequality, and graph the solution set.

1. The perimeter of the Jacob's square backyard is no more than 72 meters. What is the solution set for the length that his backyard can be?

V: _____

I: _____

S: _____

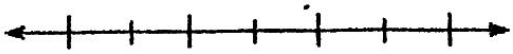


2. To get an A, you need more than 200 points on a two-part test. You score 109 points on the first part. What solution set represents how many more points you need?

V: _____

I: _____

S: _____

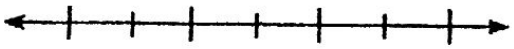


3. 3 times a number, plus 5, is at most -28. What solution set represents what the number can be?

V: _____

I: _____

S: _____

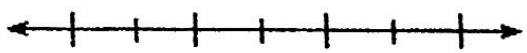


4. -4 times a number, minus 6, is at least 22. What solution set represents what the number can be?

V: _____

I: _____

S: _____

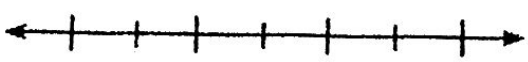


5. You buy want to buy one newspaper for $3, a souvenir for $13, and several candy bars for $2 each. What solution set would represent the number of candy bars can you buy if you only have $32?

V: _____

I: _____

S: _____

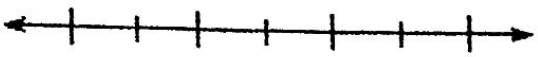


6. Twelve times the sum of a number and 3 is less than -60. What solution set represents what the number can be?

V: _____

I: _____

S: _____



7. A telephone company charges a $27 monthly service, plus $2 for each long-distance call that you make. If you budget $65 for your telephone bill each month, what solution set represents how many long distance phone calls you can make during the month without going over your budget?

V: _____

I: _____

S: _____