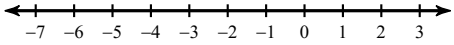
Math-2 Name_____ ID: 1

SM2 HW #145 (Inequalities)

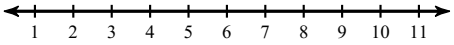
Date_____ Period____

For all problems: write the solution to the inequality ("one step then rewrite") as (a) a simplified inequality, (b) interval notation, and (c) a number line graph.

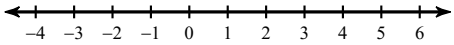
1) $p - 5 - 6p \geq 5$



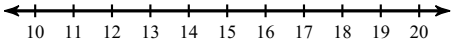
2) $5p - 2p < 12$



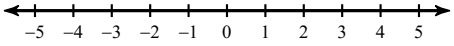
3) $5r - 2 + 7 \leq 20$



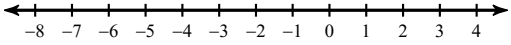
4) $3x + 3x > 6x + 2$



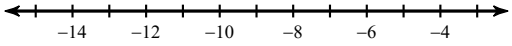
5) $33 < 3(2 + 3v)$



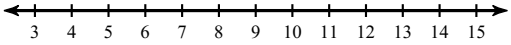
6) $8n \geq -32$ and $\frac{n}{2} < 0$



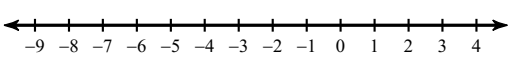
7) $x - 7 \leq -16$ or $x + 1 \geq -6$



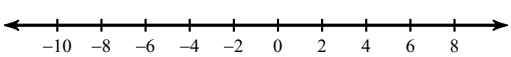
8) $2x < 14$ or $3x \geq 30$



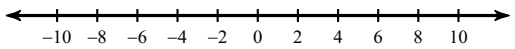
9) $-8n \leq 48$ and $-6n > -12$



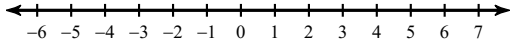
10) $-10 < k - 2 < 6$



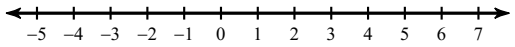
11) $-1 < \frac{n}{9} \leq 1$



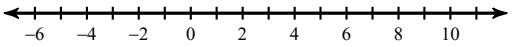
12) $-4 \geq n - 8 \geq -13$



13) $10b \geq -20$ and $-7 + b < -3$



14) $-5 + x > 2$ or $3 + x < 1$



15) Write a mathematical representation (inequality) that means:
"The are between 10 and 20,000 people at the game."

16) Write a mathematical representation (inequality) that means:
"At most, there are 500 cows on the farm."