

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

## Unit 2 Inequalities Review

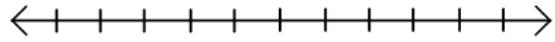
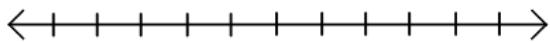
Directions: Fill in the missing information below.

Inequality	Graph	Interval Notation	Set Notation
1) $r > 4$			
2)			$\{s \in \mathbb{R}   s \leq 12\}$
3)		$(-\infty, 2] \cup (14, \infty)$	
4)			$\{x \in \mathbb{R}   -3 \leq x < 6\}$
5)			
6) $x < 4$ or $x \geq 7$			
7)		$[-6, 6]$	
8)			

Solve the following simple Inequalities, Graph and write each answer in interval and set notation.

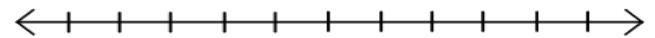
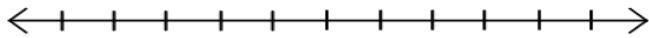
9)  $3 \geq \frac{x+5}{4}$

10)  $-4 + \frac{p}{2} \leq -7$



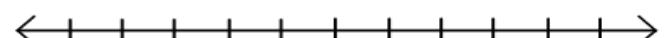
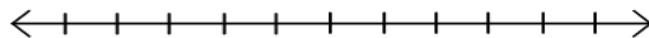
$$11) -8 + 8x \leq 8(6x - 1)$$

$$12) -6m + 38 \leq 6(-m + 6)$$



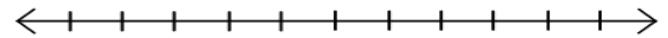
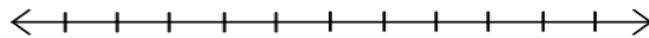
$$13) -8(5n - 2) - 6n \geq 16 - 4n$$

$$14) 3m + 9 < 2(5 - m) + 4$$



$$15) -3(2x - 8) \geq 37 + 7x$$

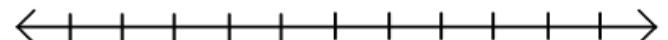
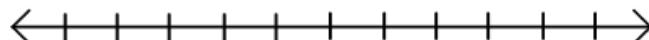
$$16) -2(2n + 3) < -4n - 5$$



Solve the following compound inequalities. Graph and write each answer in interval and set notation. \*\*Remember "Who do you want at the party, Both (and)? Either will do (or)?

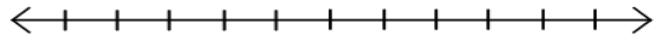
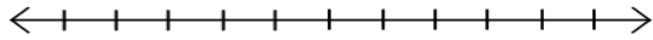
$$17) -26 \leq 2 - 4n < 30$$

$$18) 3 - 7n \geq 52 \text{ or } -6 - 9n \leq -15$$



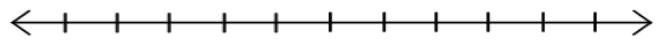
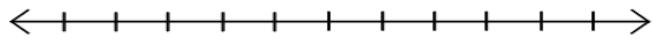
$$19) 6 - 6a \geq 9 - 7a \text{ or } -6 + 6a > 6 + 10a$$

$$20) 10 - 2v \leq -10v - 6 < -7v + 9$$



$$21) 8 + 8k \geq 8k + 9 \text{ or } 1 + 7k > 10k - 5$$

$$22) 2k + 7 \leq 7 - 2k < -10k - 9$$



$$23) 6 + 7x < 8x - 1 < 5x - 7$$

$$24) 3 - 8x \leq 10 - 8x \text{ or } 7x - 4 < 8 + 5x$$

