Name: Solve Multi-Step Inequalities		Period:
	k your solution, and graph it on a numb	ber line.
1 . $t - 12 \ge 16$	2. $n-12 < 6$	3. $6 \le g - 3$
< + + + + + + + >	$\leftarrow + + + + + + \rightarrow$	$\overset{\leftarrow + + + + + + + \rightarrow}{\bullet}$
4. $n-8 < -13$	5. $-12 > -12 + y$	6. $-6 > s - 8$
$\overset{\bullet}{\leftarrow} + + + + + + \overset{\bullet}{\rightarrow}$	$\leftarrow + + + + + + \rightarrow$	$\overset{\leftarrow}{}++++++\rightarrow$
Solve each inequality. Then chec	k your solution.	
7. $-3x \le 8 - 4x$	8. $0.6n \ge 12 - 0.4n$	9. $-8k - 12 < -9k$

10.
$$-y - 10 > 15 - 2y$$
 11. $z - \frac{1}{3} \le \frac{4}{3}$ **12.** $-2b > -4 - 3b$

Define a variable, write an inequality, and solve each problem. The check your solution.

13. A number decreased by 4 is less than 14.

14. The difference of two numbers is more than 12, and one of the numbers is 3.

15. Forty is no greater than the difference of a number and 2.

Name:	Date:	Period:			
Solve Multi-Step Inequalities - We	orksheet 344				
Solve each inequality. Then check your solution, and graph it on the number line.					
1. $t + 12 \ge 8$	2. $n+12 > -12$	3. $16 \le h + 9$			
< + + + + + + + >	$\underbrace{}{aaaaaaaaaaaaaaaaaaaaaaaaa$	$\overset{\leftarrow}{+} + + + + + \overset{\leftarrow}{+} \rightarrow$			
4. $y + 4 > -2$	5. $3r + 6 > 4r$	6. $\frac{3}{2}q - 5 \ge \frac{1}{2}q$			
		2~ 2~			
< + + + + + + >	$\overset{\leftarrow}{}+++++\rightarrow$	$\overset{\leftarrow}{}++++++\rightarrow$			
Solve each inequality. Then check ye 7. $4p \ge 3p + 0.7$	5. $r + \frac{1}{4} > \frac{3}{8}$	9. $9k + 12 > 8k$			
p = p = p + 0.7	6. <i>i</i> + + 4 < 8	$\mathbf{J} \cdot \mathbf{J} \mathbf{h} \perp \mathbf{I} \mathbf{Z} \neq \mathbf{O} \mathbf{h}$			

10. $-1.2 > 2.4 + y$	11. $4y < 5y + 14$	12. $3n + 17 < 4n$

Define a variable, write an inequality, and solve each problem. Then check your solution.

13. The sum of a number and 8 is less than 12.

14. The sum of two numbers is at most 6, and one of the numbers is -2.

15. The sum of a number and 6 is greater than or equal to -4.