

INEQUALITIES

Name: _____

- in-class assignment: PLEASE HAND IN FOR MARKS

/30

[20]

1. Show the following inequalities on a number line. Each inequality is to be shown on a separate number line.

1	$x < 10$	
2	$b < -15$	
3	$y \geq -3$	
4	$a \geq 0$	
5	$2x < 9$	
6	$3x > 3x - 12$	
7	$a < -a + 4$	
8	$-25 \geq x$	
9	$5x \leq -x + 18$	
10	$20 > -x + 5x$	

[10] 2. Clearly state, using a full sentence, whether a given inequality has infinitely many real solutions or no real solutions. Support your answer using algebra or otherwise justify your answer.

1	$x > 5$	
2	$2y \leq 2y + 10$	
3	$a < 6a - 15$	
4	$5b - 20 > 5b - 13$	
5	$x + 45 > -x - 45$	