

Constraints in Mathematical Statements

Constraints in the mathematical statements	Linear inequality notation	
1. y is greater than x		$y \geq h$
2. y is at most k times of x		$x + y \leq h$
3. y cannot exceed x		$y \geq kx$
4. y is less than two times of x by h or more		$y > x$
5. The greatest (maximum) value of y is h		$x - y \leq h$
6. x exceeds twice of y by at least k		$y \geq mx$
7. Ratio of x to y is at least $m:n$		$y \leq k$
8. y is at least k times of x		$x + y \leq k$
9. x exceeds y by at most k		$x + y \geq m$
10. y is less than x		$y \geq x$
11. y is not more than h times of x		$y \leq kx$
12. The least (minimum) value of y is h		$2x - y \geq h$
13. The sum of x and y is not less than h		$nx \leq my$
14. The sum of x and y is at most h		$y \leq hx$
15. The ratio of y to x is h or more		$x - y \leq k$
16. x exceeds three times of y by k or less		$x - 3y \leq k$
17. y is not more than k		$nx \geq my$
18. The sum of x and y cannot exceed k		$y \leq h$
19. y is not less than x		$y < x$
20. y is not less than m times of x		$x - 2y \geq k$
21. x cannot exceed y by more than h		$y \leq x$
22. The sum (total) of x and y is at least m		$x + y \geq h$
23. Ratio of x to y is not more than $m:n$		$y \geq hx$