Graphing Inequalities

In this internal we are not only graphing lines that are equal, but we are wanting to graph areas that are more or less than a line to find a 'feasible region'. This is an area where all of the inequalities hold true. The first one has been done for you.

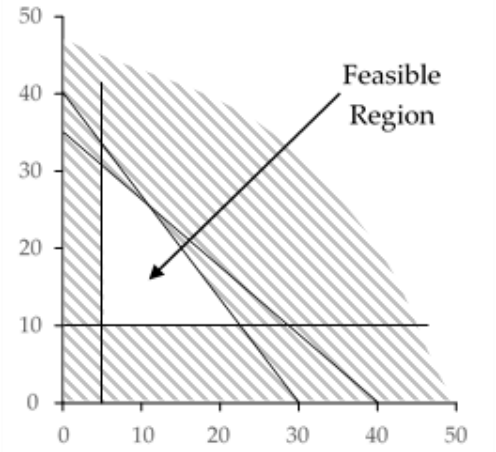
Question 1

$4x + 3y \leq 120$

$7x + 8y \leq 280$

$x \geq 5$

$y \geq 10$



Question 2

$10x + 9y \leq 450$

$3x + 8y \leq 240$

$x \geq 11$

$y \geq 18$

Question 3

$5x + 3y \leq 300$

$7x + 9y \leq 630$

$x \geq 10$

$y \geq 8$

Question 4

$16x + 15y \leq 1200$

$7x + 19y \leq 665$

$x \geq 20$

$y \geq 5$

Question 5

$11x + 14y \leq 770$
$9x + 20y \leq 900$
$x \geq 16$
$y \geq 20$

Question 6

$17x + 8y \leq 680$
$9x + 13y \leq 585$
$x \geq 7$
$y \geq 17$

Question 7

$13x + 5y \leq 325$
$8x + 15y \leq 600$
$x \geq 10$
$y \geq 9$

Question 8

$17x + 4y \leq 340$
$3x + 5y \leq 150$
$x \geq 5$
$y \geq 19$

Question 9

$17x + 5y \leq 425$
$8x + 15y \leq 600$
$x \geq 9$
$y \geq 15$

Question 10

$17x + 6y \leq 510$
$12x + 11y \leq 660$
$x \geq 6$
$y \geq 11$

Question 11

$17x + 13y \leq 1105$
$13x + 16y \leq 1040$
$x \geq 12$
$y \geq 10$

Question 12

$19x + 7y \leq 665$
$3x + 5y \leq 150$
$x \geq 12$
$y \geq 11$

Question 13

$18x + 11y \leq 990$
$12x + 13y \leq 780$
$x \geq 9$
$y \geq 15$

Question 14

$3x + y \leq 75$
$4x + 11y \leq 220$
$x \geq 17$
$y \geq 8$

Question 15

$17x + 10y \leq 850$
$11x + 12y \leq 660$
$x \geq 12$
$y \geq 7$

Question 16

$13x + 5y \leq 325$
$x + 3y \leq 60$
$x \geq 14$
$y \geq 6$