

Graphical Solutions of Systems of Linear Inequalities in Two Variables

Total points = 47

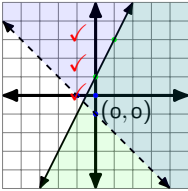
1. Solution

$y \leq 2x + 1$
 $y = 2x + 1$ ✓
 $m = 2$ ✓
 $b = 1$ ✓

$y \leq 2x + 1$
 $0 \leq 2(0) + 1$ ✓
 $0 \leq 0 + 1$ ✓
 $0 \leq 1$ ✓

$x + y > -1$
 $x + y = -1$ ✓
 $m = -1$ ✓
 $b = -1$ ✓

$x + y > -1$
 $0 + 0 > -1$ ✓
 $0 + 0 > -1$ ✓
 $0 > -1$ ✓



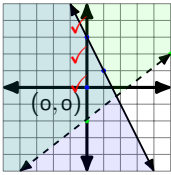
2. Solution

$y > \frac{4}{5}x - 2$
 $y = \frac{4}{5}x - 2$ ✓
 $m = \frac{4}{5}$ ✓
 $b = -2$ ✓

$y > \frac{4}{5}x - 2$
 $0 > \frac{4}{5}(0) - 2$ ✓
 $0 > 0 - 2$ ✓
 $0 > -2$ ✓

$y \leq -2x + 3$
 $y = -2x + 3$ ✓
 $m = -2$ ✓
 $b = 3$ ✓

$y \leq -2x + 3$
 $0 \leq -2(0) + 3$ ✓
 $0 \leq 0 + 3$ ✓
 $0 \leq 3$ ✓



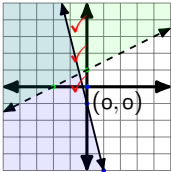
3. Solution

$x - 2y < -2$
 $-2y < -x - 2$ ✓
 $\frac{-2y}{-2} < \frac{-x}{-2} - \frac{2}{-2}$ ✓
 $y = \frac{1}{2}x + 1$ ✓
 $m = \frac{1}{2}$ ✓
 $b = 1$ ✓

$x - 2y < -2$
 $0 - 2(0) < -2$ ✓
 $0 < -2$ ✓

$y \leq -4x - 1$
 $y = -4x - 1$ ✓
 $m = -4$ ✓
 $b = -1$ ✓

$y \leq -4x - 1$
 $0 \leq -4(0) - 1$ ✓
 $0 \leq 0 - 1$ ✓
 $0 \leq -1$ ✓



Graphical Solutions of Systems of Linear Inequalities in Two Variables

Total points = 47

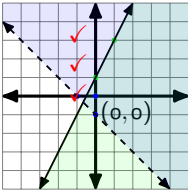
1. Solution

$y \leq 2x + 1$
 $y = 2x + 1$ ✓
 $m = 2$ ✓
 $b = 1$ ✓

$y \leq 2x + 1$
 $0 \leq 2(0) + 1$ ✓
 $0 \leq 0 + 1$ ✓
 $0 \leq 1$ ✓

$x + y > -1$
 $x + y = -1$ ✓
 $m = -1$ ✓
 $b = -1$ ✓

$x + y > -1$
 $0 + 0 > -1$ ✓
 $0 + 0 > -1$ ✓
 $0 > -1$ ✓



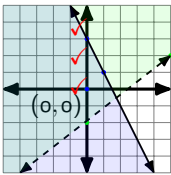
2. Solution

$y > \frac{4}{5}x - 2$
 $y = \frac{4}{5}x - 2$ ✓
 $m = \frac{4}{5}$ ✓
 $b = -2$ ✓

$y > \frac{4}{5}x - 2$
 $0 > \frac{4}{5}(0) - 2$ ✓
 $0 > 0 - 2$ ✓
 $0 > -2$ ✓

$y \leq -2x + 3$
 $y = -2x + 3$ ✓
 $m = -2$ ✓
 $b = 3$ ✓

$y \leq -2x + 3$
 $0 \leq -2(0) + 3$ ✓
 $0 \leq 0 + 3$ ✓
 $0 \leq 3$ ✓



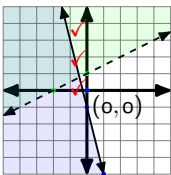
3. Solution

$x - 2y < -2$
 $-2y < -x - 2$ ✓
 $\frac{-2y}{-2} < \frac{-x}{-2} - \frac{2}{-2}$ ✓
 $y = \frac{1}{2}x + 1$ ✓
 $m = \frac{1}{2}$ ✓
 $b = 1$ ✓

$x - 2y < -2$
 $0 - 2(0) < -2$ ✓
 $0 < -2$ ✓

$y \leq -4x - 1$
 $y = -4x - 1$ ✓
 $m = -4$ ✓
 $b = -1$ ✓

$y \leq -4x - 1$
 $0 \leq -4(0) - 1$ ✓
 $0 \leq 0 - 1$ ✓
 $0 \leq -1$ ✓



Graphical Solutions of Systems of Linear Inequalities in Two Variables

Total points = 47

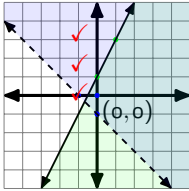
1. Solution

$y \leq 2x + 1$
 $y = 2x + 1$ ✓
 $m = 2$ ✓
 $b = 1$ ✓

$y \leq 2x + 1$
 $0 \leq 2(0) + 1$ ✓
 $0 \leq 0 + 1$ ✓
 $0 \leq 1$ ✓

$x + y > -1$
 $x + y = -1$ ✓
 $m = -1$ ✓
 $b = -1$ ✓

$x + y > -1$
 $0 + 0 > -1$ ✓
 $0 + 0 > -1$ ✓
 $0 > -1$ ✓



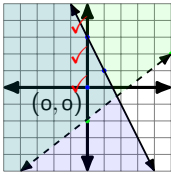
2. Solution

$y > \frac{4}{5}x - 2$
 $y = \frac{4}{5}x - 2$ ✓
 $m = \frac{4}{5}$ ✓
 $b = -2$ ✓

$y > \frac{4}{5}x - 2$
 $0 > \frac{4}{5}(0) - 2$ ✓
 $0 > 0 - 2$ ✓
 $0 > -2$ ✓

$y \leq -2x + 3$
 $y = -2x + 3$ ✓
 $m = -2$ ✓
 $b = 3$ ✓

$y \leq -2x + 3$
 $0 \leq -2(0) + 3$ ✓
 $0 \leq 0 + 3$ ✓
 $0 \leq 3$ ✓



3. Solution

$x - 2y < -2$
 $-2y < -x - 2$ ✓
 $\frac{-2y}{-2} < \frac{-x}{-2} - \frac{2}{-2}$ ✓
 $y = \frac{1}{2}x + 1$ ✓
 $m = \frac{1}{2}$ ✓
 $b = 1$ ✓

$x - 2y < -2$
 $0 - 2(0) < -2$ ✓
 $0 < -2$ ✓

$y \leq -4x - 1$
 $y = -4x - 1$ ✓
 $m = -4$ ✓
 $b = -1$ ✓

$y \leq -4x - 1$
 $0 \leq -4(0) - 1$ ✓
 $0 \leq 0 - 1$ ✓
 $0 \leq -1$ ✓

