

# Fill in the Blanks

# Solving Systems of Inequalities

First Inequality	Solution to 1 <sup>st</sup> Inequality	2 <sup>nd</sup> Inequality	Solution to 2 <sup>nd</sup> Inequality	Combined Solution
$2x - 1 \geq 4x + 3$	$x \leq -2$	$3(7 + x) > 6$	$x > -5$	$-5 < x \leq -2$
$\frac{3 + 2x}{4} < 3$	$x < \frac{9}{2}$	$5x - 2 < 5 + x$	$x < \frac{7}{4}$	$x < \frac{7}{4}$
$3(x - 3) > 2x - 11$	$x > -2$	$5 - x \leq 7 - 4x$	$x \leq \frac{2}{3}$	$-2 < x \leq \frac{2}{3}$
$7(2x + 1) > 4x - 3$	$x > -1$	$x^2 - 2x - 8 \leq 0$	$-2 \leq x \leq 4$	$-1 < x \leq 4$
$x^2 - 7x + 10 < 0$	$2 < x < 5$	$6(1 - x) \leq 0$	$x \geq 1$	$2 < x < 5$
$\frac{5x + 1}{8} > 2$	$x > 3$	$2x^2 - 9x \geq 5$	$x \leq -\frac{1}{2}$ or $x \geq 5$	$x \geq 5$
$2(2 - 3x^2) \geq 5x$	$-\frac{4}{3} \leq x \leq \frac{1}{2}$	$12 - 5x < 9 - 2x$	$x > 1$	No values
$2x^2 < 50$	$-5 < x < 5$	$5x(x - 6) \leq 8x - 21$	$\frac{3}{5} \leq x \leq 7$	$\frac{3}{5} \leq x < 5$