Algebra 1 6.6

Solve systems of linear inequalities by graphing* Ch. 5.6

Apply systems of linear inequalities

linear inequality* $y < x + 5$

system

boundary

open $< \ >$ - - -

closed $\geq \ \leq$ ———

y= k (horizontal) $y = 3$

x= k (vertical) $x = 2$

whiteboards

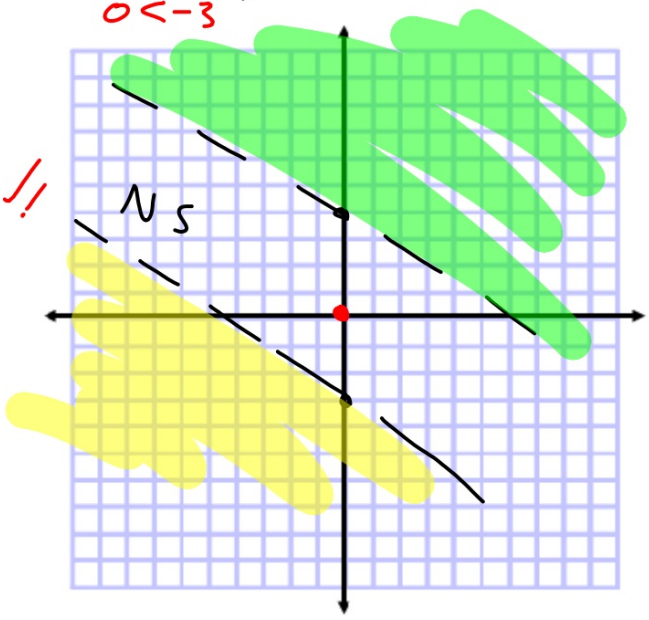
$0 > 4$

$x + y > 4 \rightarrow y = -x + 4$

$x + y < -3 \quad y = -x - 3$

$-x \quad -x$

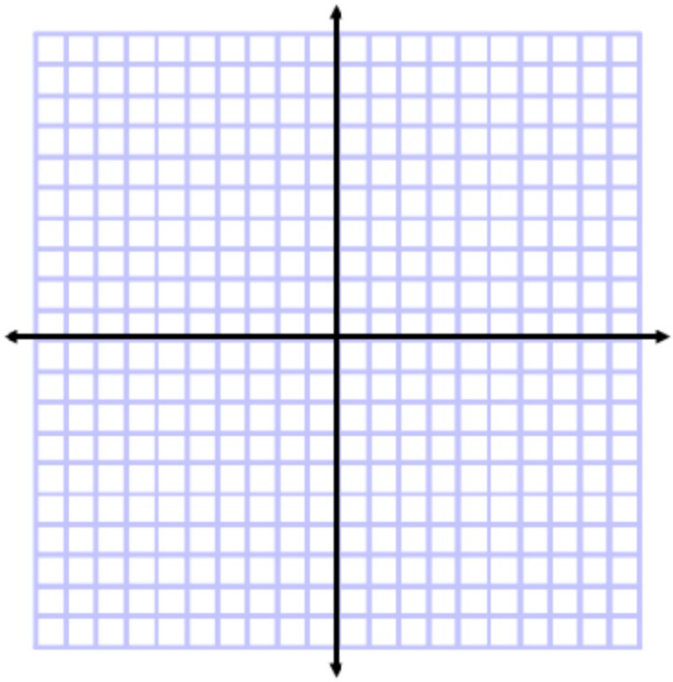
$0 < -3$



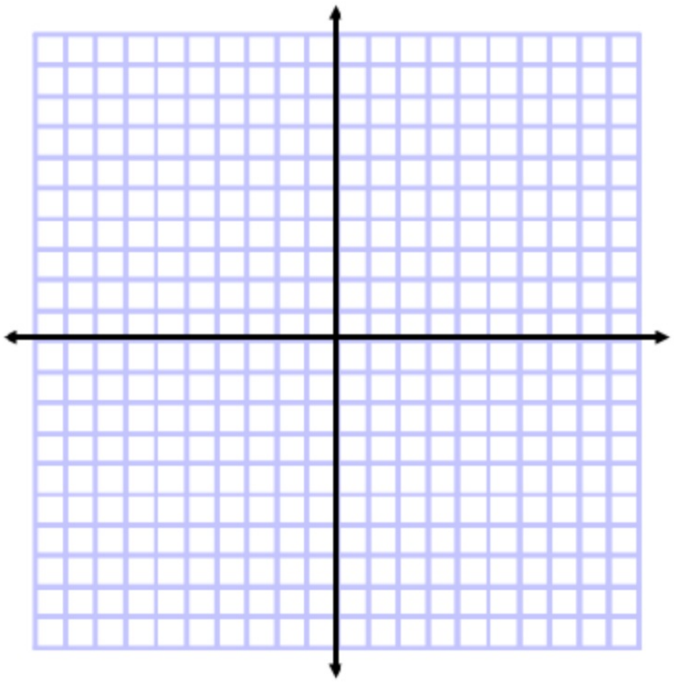
Whiteboards

**1C.** $y \geq -4$

$3x + y \leq 2$



**1D.** $x + y > 2$
$-4x + 2y < 8$

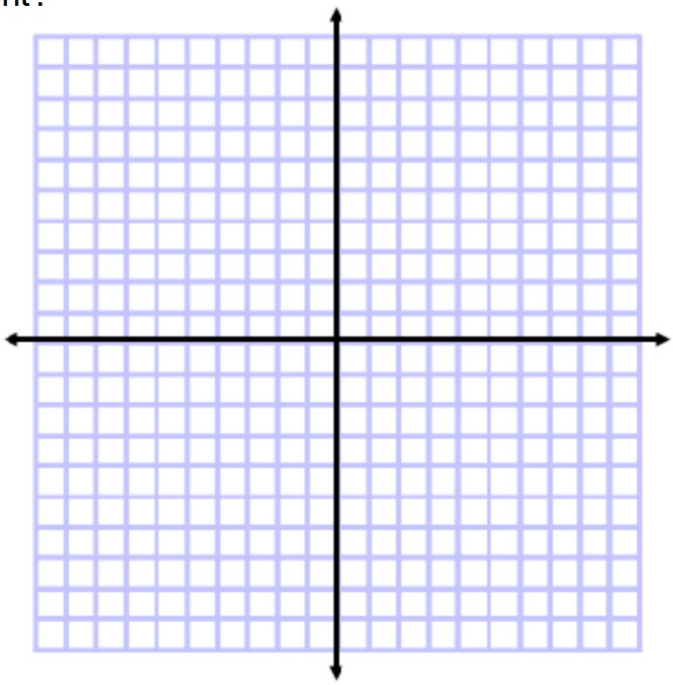


How is this problem different?

## GuidedPractice

**2A.** $y > 3$

$y < 1$



**2B.** $x + 6y \leq 2$

$y \geq -\frac{1}{6}x + 7$

$y \leq 2x + 2$

$y \geq -1x + 1$