x graph $4x - y < 5$

No =

Dotted line for border

$x = 2$

$4(2) - y < 5$

$8 - y < 5$

$-8 \quad -8$

$(-1)(-y) < -3(-1)$

$y > 3$

No =

(2, 3.1)
(2, 3.5)
(2, 4)
(2, 5)

$x = 1$

$4(1) - y < 5$

$4 - y < 5$

$-4 \quad -4$

$(-1)(y) < (1)(-1)$

$y > -1$

(1, -0.5)
(1, 0)
(1, 1)
(1, 2)

$x = -1$

$4(-1) - y < 5$

$-4 - y < 5$

$+4 \quad +4$

$(-1)(y) < (9)(-1)$

$y > -9$

$x = 0$

$4(0) - y < 5$

$(-1)(-y) < 5(-1)$

$y > -5$

$4x - y < 5$

$-4x \quad -4x$

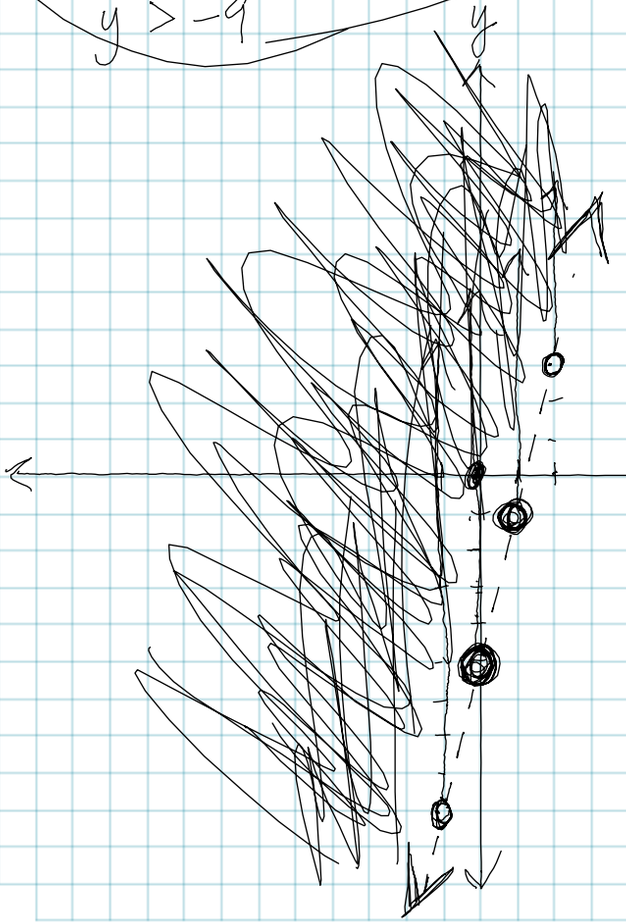
$(-1)(y) < (-4x + 5)(-1)$

$y > 4x - 5$

① graph → $y = 4x - 5$

line (dotted)

$\frac{4}{1}$ slope



② shade by picking a test point

(x, y)

$(0, 0)$

$4(0) - 0 < 5$

$0 - 0$

$0 < 5$? yes