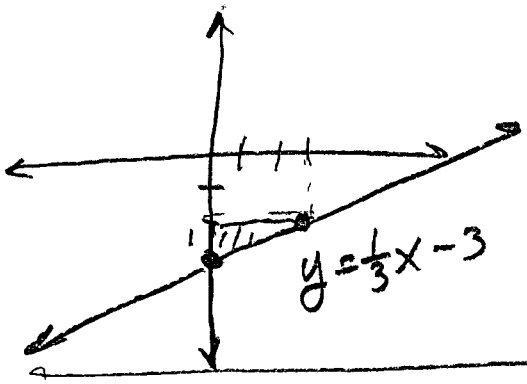
Algebra 1 Tues. 12-4-12 Class Notes

HW Review ① $m = \frac{1}{3}$ $y_{INT} = -3$ $y = mx + b$ SLOPE-INTERCEPT FORM

$(0, -3)$
$(0, b)$

$y = \frac{1}{3}x - 3$

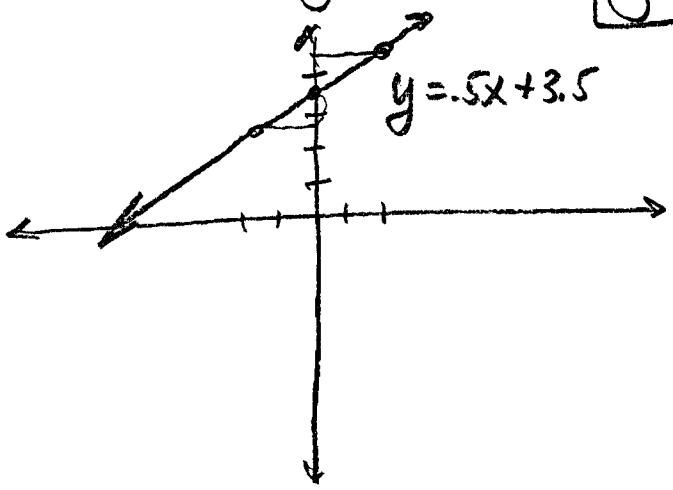


EOL

"begin at b", "move by m"

$\frac{1}{2} = \frac{\text{rise}}{\text{run}}$

② $m = 0.5$ $y_{INT} = 3.5$ $y = .5x + 3.5$



x	y	
0	3.5	y-INT
0	b	

③ $m = 5$ $y_{INT} = -1$

$y = mx + b$

$\frac{5}{1} = \frac{\text{rise}}{\text{run}}$

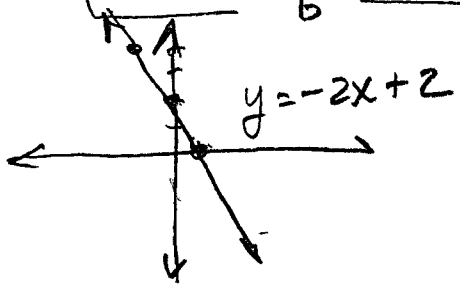
$y = 5x - 1$

④ $m = -2$ $y_{INT} = 2$

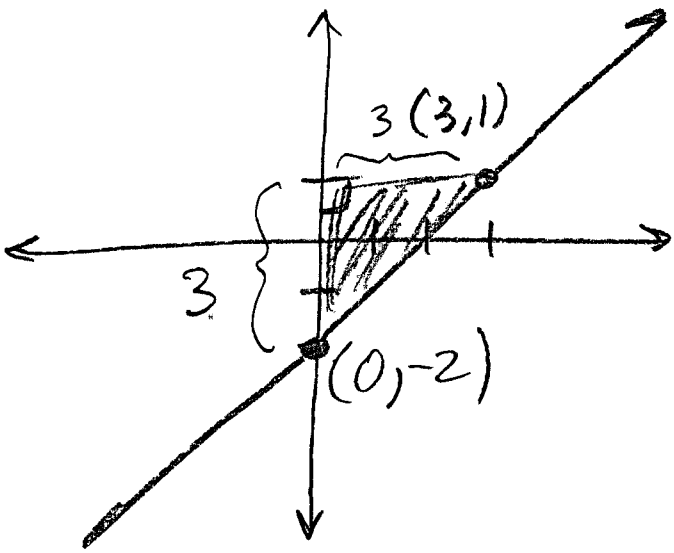
$y = -2x + 2$

$(0, -1)$

b



⑤ EOL in SI form



$y = mx + b$

$y = \frac{3}{3}x - 2$

$\boxed{y = 1x - 2}$

or

$\boxed{y = x - 2}$

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⑥ $m = 8$ $y_{INT} = 2$ $\Rightarrow$ $\boxed{y = 8x + 2}$

⑦ $m = 0$ $y_{INT} = -3$ $\Rightarrow$ $y = 0x - 3$ $\Downarrow$ $\boxed{y = -3}$

⑧ $m = 5$ (2,7) is on line

⑨ $m = -2$ (1,-3) is on line

see next page

(8) $m = 5$ $(2, 7)$ ON LINE

x, y

$y = mx + b$

$7 \quad 2$

$y = 5x + b$

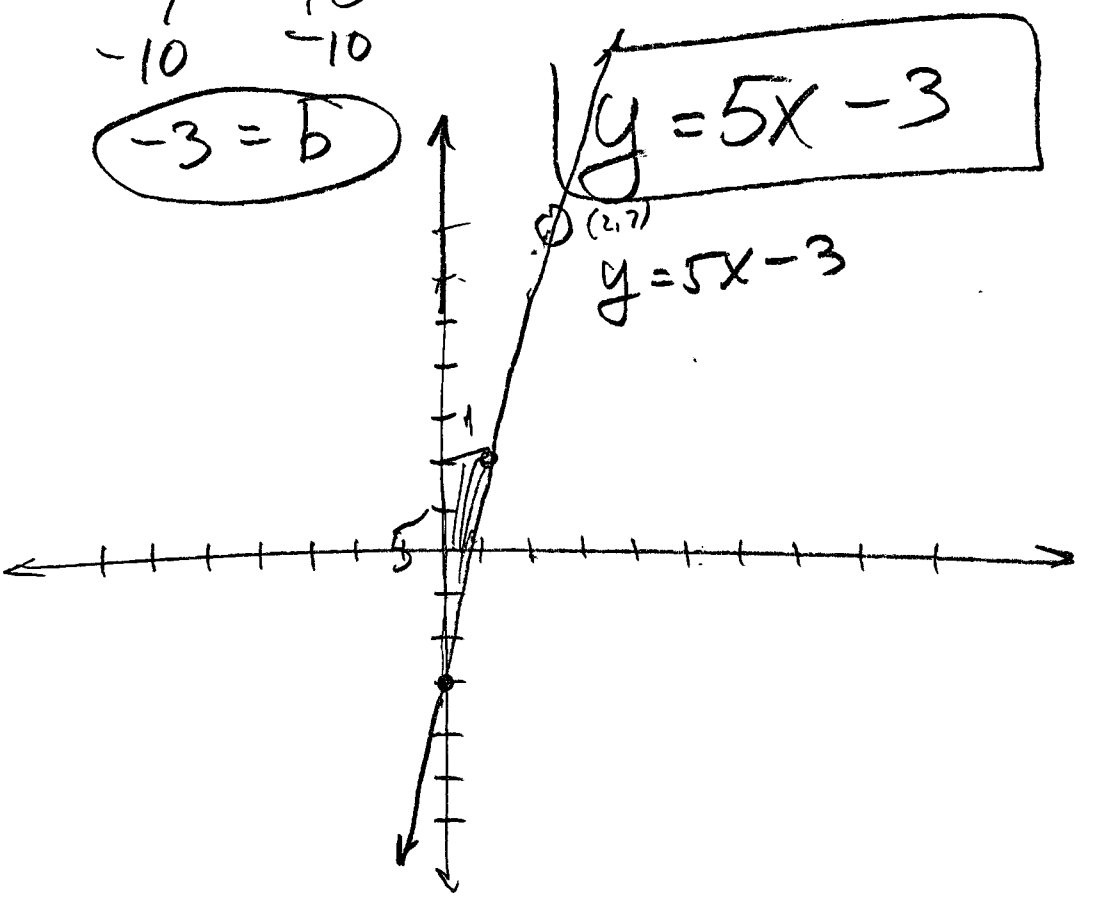
$(7) = 5(2) + b$

$7 = 10 + b$

$-10 \quad -10$

$-3 = b$

$y = 5x - 3$



(9) $m = -2$ (x, y) $(1, -3)$

$y = mx + b$

$y = -2x + b$

$(-3) = -2(1) + b$

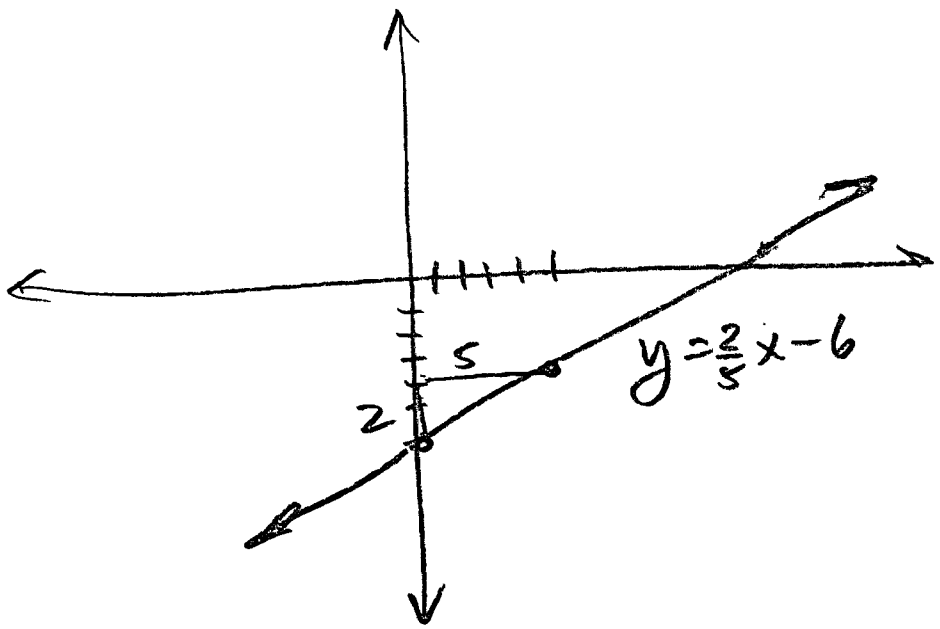
$-3 = -2 + b$

$+2 \quad +2$

$-1 = b$

$y = -2x - 1$

(10) $y = \frac{2}{5}x - 6$



(11) $3x - y = 1$

$+y \quad +y$

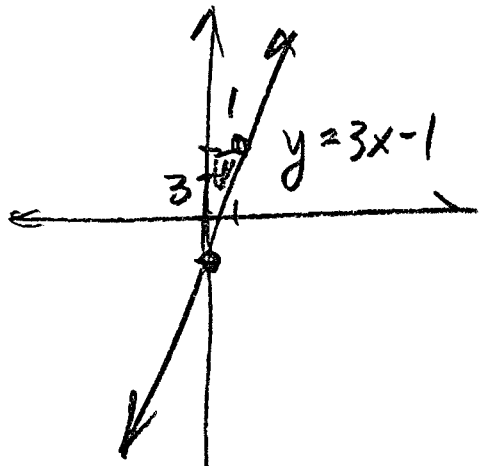
$3x = 1 + y$

$-1 \quad -1$

$3x - 1 = y$

$y = 3x - 1$

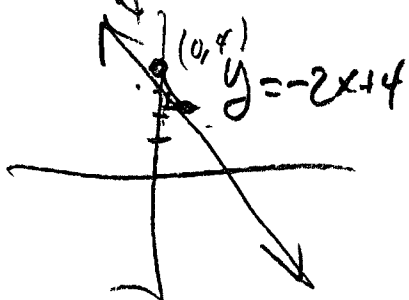
m: $\frac{3}{1}$ b: $(0, -1)$



(12) $2x + y = 4$

$-2x \quad -2x$

$y = -2x + 4$



(13) rate = $m = \frac{18 \text{ mi}}{1 \text{ hr}}$ $b = 10$

$y = 18x + 10$

$d = 18h + 10$

m b

$h = 2$

$d = 18(2) + 10 = 46 \text{ mi}$

$(2, 46)$

h, d