

2.7 The Roles of

Rate Δ m & b in

$y = mx + b$ \leftarrow y int

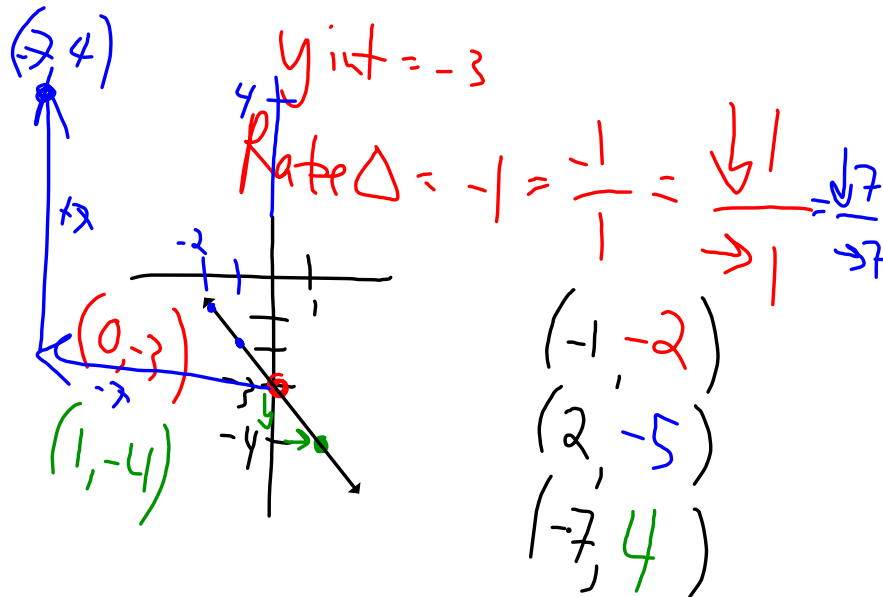
$y = ax + b$



Worksheet D examples



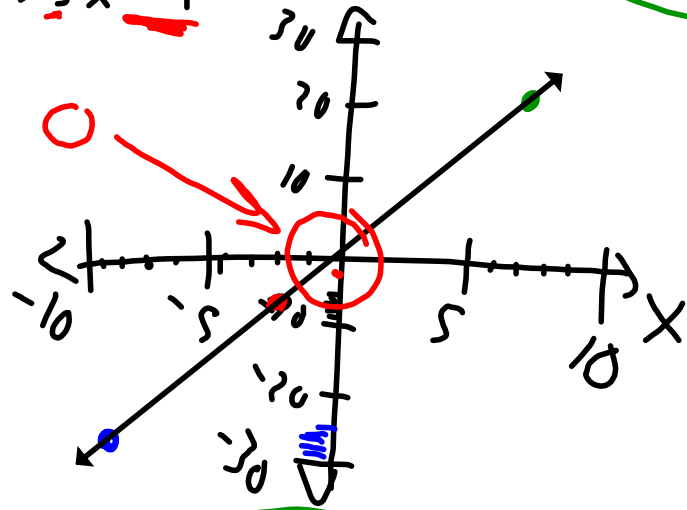
f) $y = -x - 3$



Worksheet D

a) $y = 3x - 1$

y int



$(-2, -7)$

$(7, 20)$

$(-9, -28)$

y int
 $(0, -1)$

$\Delta = \frac{3 - 1}{1 - 1} = \frac{3}{0}$
 $= \frac{3}{0} \rightarrow \infty$

- $(0, -1)$
- $(1, 2)$
- $(2, 5)$

- $(3, 8)$
- $(5, 14)$
- $(7, 20)$

$$b) y = 2x - 4$$

$$(3, ?), (-5, ?), (10, ?)$$

when $x=3$

$$y = 2(3) - 4$$

$$\rightarrow y = 2$$

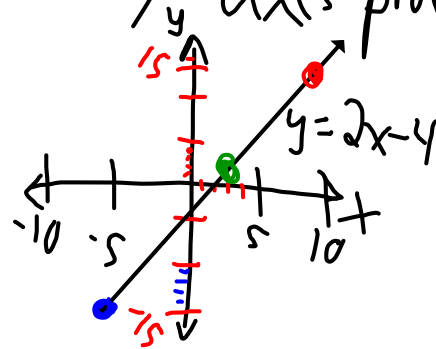
$$\underline{(3, 2)}$$

$$\underline{(-5, -14)}$$

$$\underline{(10, 16)}$$

iii) Complete the order pairs using the equation.

ii) Sketch ^{Graph} on axes provided.



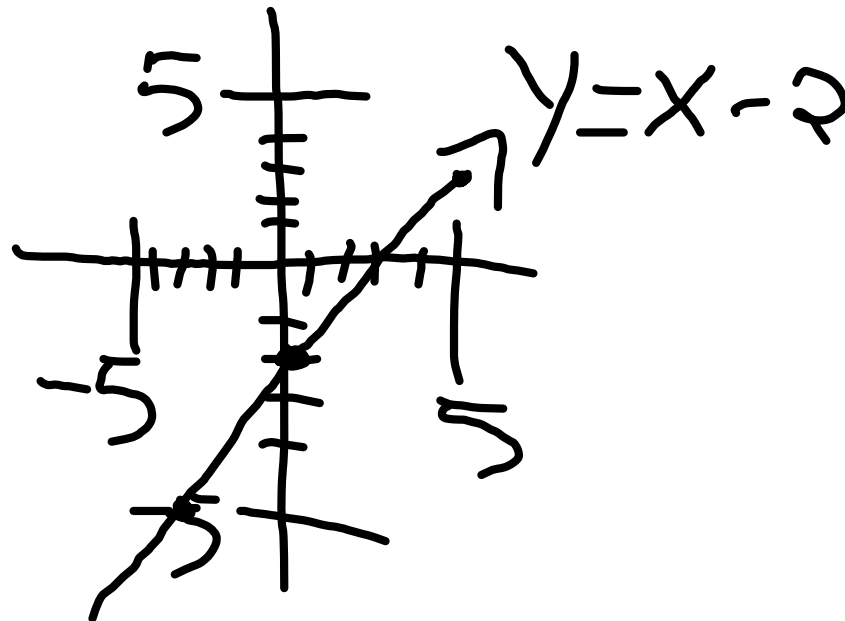
c) Andreas

$$y = x - 2$$

$$(0, -2)$$

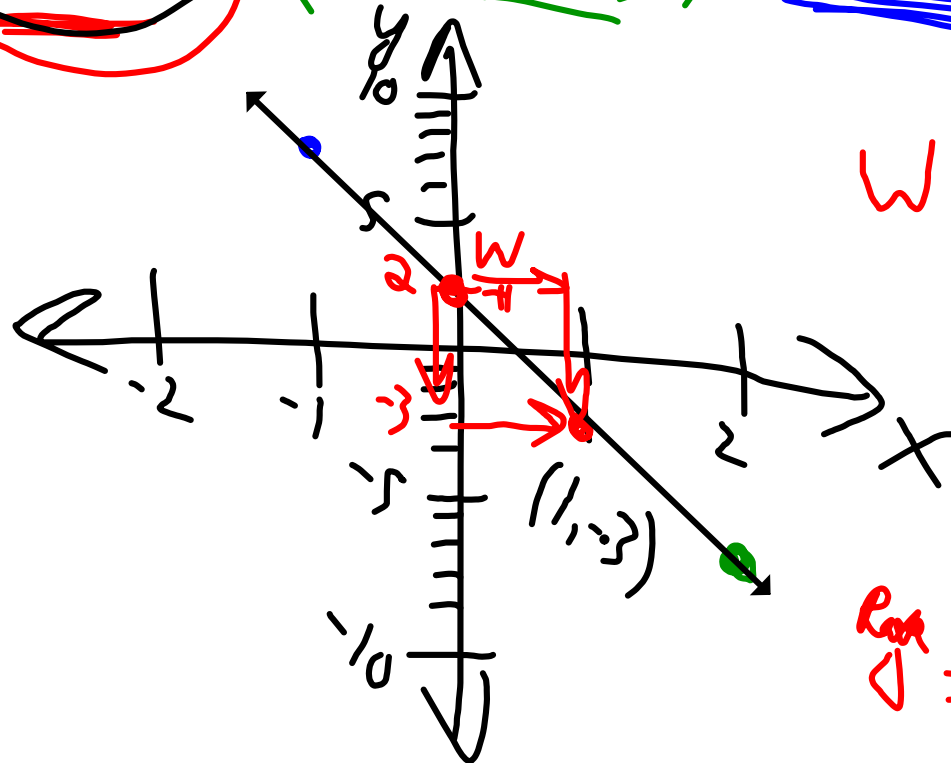
$$(-3, -5)$$

$$(5, 3)$$



d) $y = -5x + 2$

$(1, -3)$ $(2, -8)$ $(-1, 7)$



w y -int
 $(0, 2)$

variable
 $-5x$

$\text{Rate } \Delta = -5 = \frac{-5}{1}$

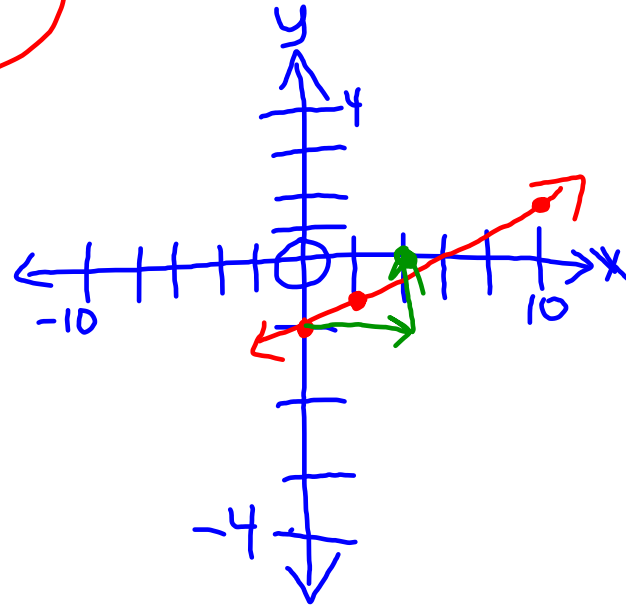
e) Judy

$$y = 0.25x - 1$$

y_{int}

(4, 0)

$$(0, -1)$$
$$(10, 1.5)$$
$$(1, -0.75)$$



$$\text{Rate } \Delta = \frac{0.25}{1} = \frac{25}{100} = \frac{1}{4}$$

$$\text{Rate } \Delta = \frac{1}{4} = \frac{\uparrow 1}{\rightarrow 4}$$