3.5 Notes

# 3.5 Function Notation and Adding Functions

## Adding/Subtracting Functions on a Graph

- To add/subtract two graphed functions, add/subtract the *y* coordinates that have the same *x* coordinate.
  - Hint: Look for points on both graphs that lie on the same vertical line.

Ex 1: Add the two functions in the graph.

$$3 + 3 = 6$$

$$-1 + 5 = 4$$



5

y = 2x – 1

(2, 3)    3
          3

x + y = 5

–1
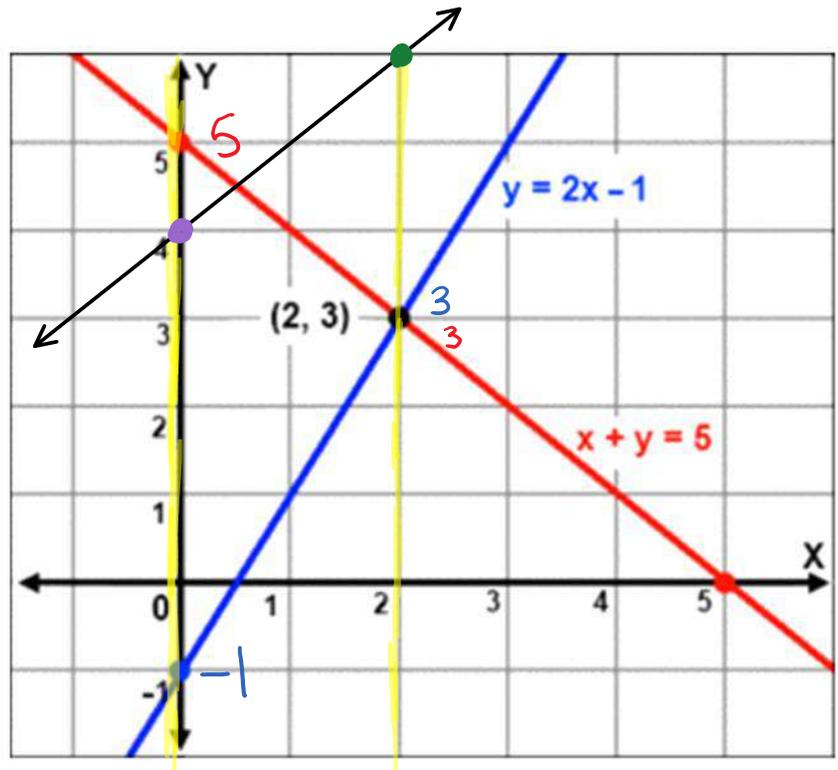
# Ex 2: Add the two functions in the graph.

$$3 + {-}2 = 1$$

$$1 + {-}4 = {-}3$$

y = 2x + 1

y = 2x – 4
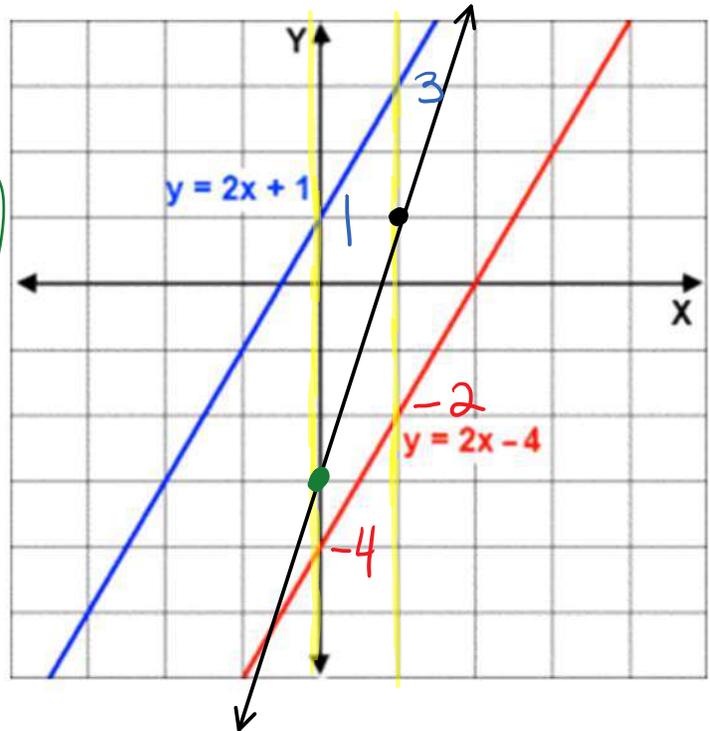
Ex 3: Use the graph of each function provided to find the values indicated.

$x=1$, $y=?$

$$f(1) = \underline{0}$$

$x=-5$, $y=?$

$$f(-5) = \underline{3}$$

$y=2$, $x=?$

$$f(x) = 2, \quad x = \underline{-3}$$

$y=-2$, $x=?$

$$f(x) = -2, \quad x = \underline{5}$$
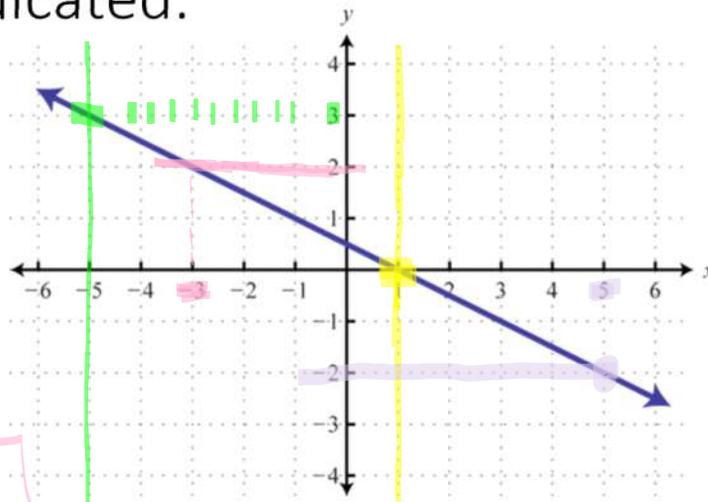
# To do list:

- 3.5 Ready (odd), Set (4-5), Go (9-10)
  - For **Set** there are two #5s. Do the first one.

① $h(t) = 2t - 5$

a. $h(-4) = -13$

$2(-4) - 5$
$-8 - 5 = -13$

b. $h(t) = 23$, $t = 14$

$23 = 2t - 5$
$\phantom{23}+5 \quad\quad +5$
$\overline{28 = 2t}$
$\dfrac{28}{2} = \dfrac{2t}{2}$

$14 = t$