

Finding Linear Functions
Lecture 9/14/23 : ~~Systems of Linear Equations~~

HW Due : ~~Homework~~, 12, 13, 14, 15

Fri. Sat. Mon. Wed.

Exam Next week Tuesday / Webwork / Learning Class
Quiz 3 Tomorrow

Recall :

~~S~~-I-F

$$y = mx + b$$

$m = \text{slope}$

$b = y\text{-coord}$
of $y\text{-int.}$

P-S-F :

$$y = m(x - x_1) + y_1$$

$m = \text{Slope}$

$(x_1, y_1) = 1^{\text{st}}$ point
on the line.

Ex: #6 workbooks

① Find points

~~①~~ $(-1, 6)$ $(2, \frac{29}{4})$

~~P-S-F~~

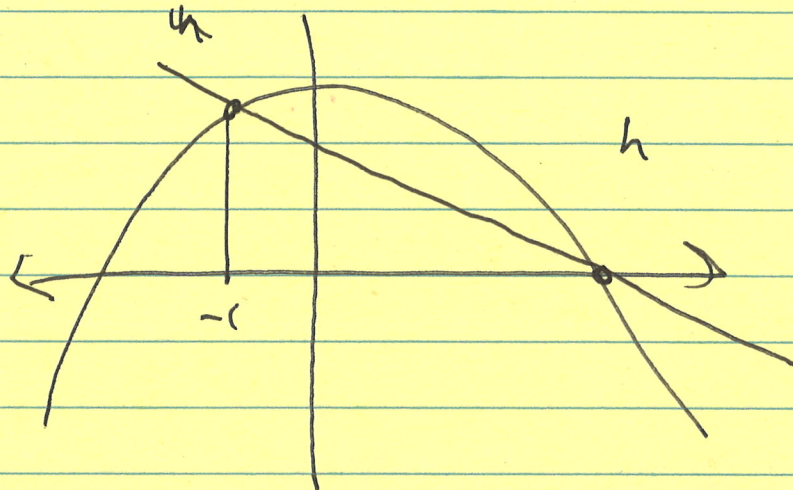
② Find slope

$$\frac{\frac{29}{4} - 6}{2 - (-1)} = \frac{\frac{5}{4}}{3} = \boxed{\frac{5}{12}}$$

③ P-S-F

$$y = \frac{5}{12}(x + 1) + 6$$

Ex #8



~~Ans~~

① Find where $h=0$.

$$0 = x^2 + 4 \Leftrightarrow x = \pm 2$$

-2 ~~count~~ is not what we want
2 is!

② We have points $(-1, h(-1))$ and $(2, 0)$
" $(-1, 3)$

③ Find slope $m = \frac{3}{3} = 1$

④ P-S-F

$$y = (x+1) + 3$$