

BE-1A WEDNESDAY 2-21-07

FIND THE SLOPE OF THE LINE
THROUGH EACH PAIR OF POINTS.

① $(-3, -1), (6, -4)$

② $(4, 2), (1, 1)$

③ $(5, 3), (5, -8)$

WRITE THE EQUATION OF A LINE
WITH THE GIVEN SLOPE AND Y-INTERCEPT

④ $m = \frac{1}{4}$ $y_{\text{int}} = -6$

①

FINDING THE EOL IF ALL YOU
 KNOW ARE TWO POINTS ON THE LINE.

EX) FIND EOL THROUGH $(-3, -1), (6, -4)$

STEP 1, FIND $m \Rightarrow (-3, -1), (6, -4)$

$$m = \frac{-4 + 1}{6 + 3} = \frac{-3}{9} = \left(-\frac{1}{3} = m\right)$$

STEP 2 $\Rightarrow$
 FIND b

$$y = mx + b$$

$$\uparrow$$

$$-\frac{1}{3} = m$$

$$(-3, -1)$$

x, y

$$-1 = -\frac{1}{3} \cdot -3 + b$$

$$-1 = 1 + b$$

$$-1 \quad -1$$

$$\boxed{-2 = b}$$

STEP 3 $\Rightarrow$
 EOL

$$y = mx + b$$

$$\uparrow$$

$$-\frac{1}{3} \quad -2$$

$$\boxed{y = -\frac{1}{3}x - 2}$$

ⓧ Pg. 283 # 7 $\Rightarrow (5,1), (8,-2)$

ⓧ Pg 283 # 8 $\Rightarrow (6,0), (0,4)$

ⓧ Pg 283 # 9 $\Rightarrow (5,2), (-7,-4)$

Homework: • Read Ch. 5-4

• Pg 283 # 21 to 24

Summary

Find EOL through 2 points

- Find m
- use $y = mx + b$ + $(x,y) + m$ to find b
- use $y = mx + b + m + b$ for EOL