

BE-1B

MONDAY 10-1-07

- ① Write the EOL in S-I Form
with slope $\frac{3}{4}$ through $(-4, -5)$

💡 You can use either the
"P-S method" or " $y=mx+b$ twice"
method

- ② Write the EOL in S-I Form
with slope -2 through $(0, -4)$

~~~~~ ANSWER WB ~~~~~

- ① Pg. 65 # 8  
② Pg. 65 # 9

# Some Geometry Terms

Complementary  
Angles

Angles THAT ADD UP  
to 90 degrees =  $90^\circ$



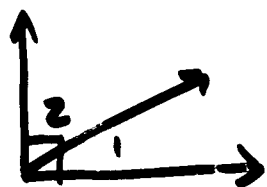
RIGHT ANGLE  
(PERPENDICULAR)

Supplementary  
Angles

Angles THAT ADD UP  
to  $180^\circ$

Memory  
Aid

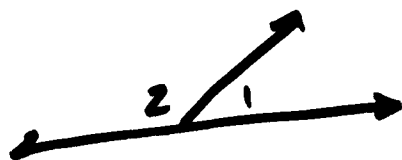
90, 180 in order  
C, S Alphabetical



$$m\angle 1 = 30^\circ$$

$$m\angle 2 = 60^\circ$$

$\angle 1$  and  $\angle 2$  ARE complementary



$$m\angle 1 = 20^\circ$$

$$m\angle 2 = 160^\circ$$

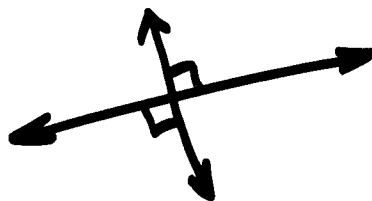
$\angle 1$  and  $\angle 2$  ARE supplementary

## Ch. 5-6 Parallel and Perpendicular Lines

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// parallel, lines never meet

$\perp$  perpendicular, lines meet at  $90^\circ$



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$m_{//}$  parallel lines have the **same** slope

$y = 2x + 5$  is // to  $y = 2x - 8$

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$m_{\perp}$  perpendicular lines have slopes that are **NEGATIVE RECIPROCAL.**

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$y = 2x + 7$  is  $\perp$  to  $y = -\frac{1}{2}x + 16$

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Ex 1  
Pg 292

Find EOL in S-I Form  
through  $(-1, -2)$  and // to  $y = -3x - 2$

$$m_{//} \text{ to } y = -3x - 2$$

$$m_{//} = -3$$

$$\begin{array}{c} (-1, -2) \\ x, y \end{array}$$

$$y + 2 = -3(x + 1)$$

$$\begin{array}{ccc} y + 2 & = & -3x - 3 \\ -2 & & -2 \end{array}$$

$$\boxed{y = -3x - 5}$$

Alternate method,  $y = mx + b$  twice

$$\begin{array}{ccc} m_{//} = -3 & (-1, -2) & y = mx + b \\ & \begin{array}{c} x \quad y \end{array} & \end{array}$$

$$-2 = -3 \cdot -1 + b$$

$$-2 = 3 + b$$

$$\begin{array}{cc} -3 & -3 \end{array}$$

$$\boxed{-5 = b}$$

$$\boxed{y = -3x - 5} \quad \checkmark$$

4. **Ex 3**  
PG 294 Find EOL in S-I Form for line through  $(-3, -2)$  and perpendicular to  $x + 4y = 12$

$$m_{\perp} \text{ to } x + 4y = 12$$

$$\frac{4y}{4} = \frac{-x + 12}{4}$$

$$y = -\frac{1}{4}x + 3$$

$m_{\perp} = 4$  through  $(-3, -2)$   
x, y

$$y+2=4(x+3)$$

$$\begin{array}{r} y+2 = 4x+12 \\ -2 \qquad -2 \end{array}$$

use P-S  
method,  
could use  
 $y = mx + b$  twice

$$y = 4x + 10$$

HW: Read Ch 5-7 "Scatter Plots"

- Pg. 296 # 13, 14, 28, 29, 34