

5.2. Point-Slope form  
cont.

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equations of  
Recall: Parallel Lines have the Same Slope!!

Write the equation of the line in Slope-Int. form that is parallel to  $y=2x-3$  & it passes through  $(3,-1)$

$y=mx+b$

$m=$   
 $y\text{-int}=$

But... that is Not what I was given!

equation  
 $y=2x-3$

Point on the line

$(3, -1)$   
 $(x, y)$

the equation we are creating is parallel to the equation given

∴ the Slopes are the same at  $m=2$

Really, I was given the Slope & a Pt. on the line  
∴ I can only use the Pt-Slope form.

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

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

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

$y+1 = 2x-6$   
 $-1$

$y = 2x - 7$

This is Not the Slope-Int. form...  
So... I need to get rid of the grouping symbols and get y by itself

check: use...  $(3, -1)$

$-1 \stackrel{?}{=} 2(3) - 7$

$-1 \stackrel{?}{=} 6 - 7$

$-1 = -1$  ✓

wk. sl. 5.3...

1-3: S-I-F from a graph

Given: 2pts + graph

Need:  $m = \frac{y_2 - y_1}{x_2 - x_1}$  or  $m = \frac{\text{rise}}{\text{run}}$

Need: y-int... (actually given as one of the pts)

4-6: S-I-F from a graph

Given: 2pts + graph

Need:  $m = \frac{y_2 - y_1}{x_2 - x_1}$  or  $m = \frac{\text{rise}}{\text{run}}$

Need: y-int ... must figure it out.

#4  
Scale  
Different

7-12: S-I-F from 2pts

Given: 2pts only

Use  $\frac{y_2 - y_1}{x_2 - x_1}$  to get m

unless... one of those points is the y-int  
n, 4, 10

Use m + one pt w/  $y - y_1 = m(x - x_1)$   
Solve for  $y = mx + b$

wk. 5.4

1-9: S-F.

Simply solve + move  
terms around to get  
it into  $Ax + By = C$

10-12: S-F but w/ Fractions

\* Everything By the  
Denom.

$$\textcircled{10} 2(y) = 2\left(5x - \frac{1}{2}\right)$$

$$2y = 10x - 1$$

Then solve for  $Ax + By = C$

O.T.L.

① ... Start New Work on the wk.st. Use Old work to help & save time. Use the mapping to <sup>Now</sup> Correctly Answer the question...

① Write the Summary Box on Pg 280 at the Bottom

② pg 281-282: 1-7(a), 14, 19, 24, 25, 35, 37, 39, 40, 41, 42

turned in →