

5.2. Point-Slope Form
cont.

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Recall: ^{equations of} 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 -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

\therefore the slopes are the same. $m=2$

Really, I was given the Slope & a Point on the line

\therefore I can ONLY use the Point-Slope Form

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

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

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

$y+1 = 2x-6$

$y = 2x-7$

\rightarrow This is not the Slope-Int. Form...
So... I need to get rid of the grouping symbols and get 'y' by itself

$(3,-1)$

$y=2x-7$

Check

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

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

$-1 = -1$

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 points)

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: 2 points only

must use... $m = \frac{y_2 - y_1}{x_2 - x_1}$

Unless... one of those points is the y-int

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 +/or Move
terms around to get
it into $Ax + By = C$

10-12: S-F but w/ Fractions

Multiply everything By the
Denom.

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

$$2y = 10 - 1$$

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 ^{Now} 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 →