

5.2. Point-Slope Form March. 07, 2007
cont.

^{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 point on the line
 $y=2x-3$ $(3, -1)$
the equation we are creating is parallel to the equation given (x_1, y_1) therefore
 \therefore the Slopes are the Same at: $m=2$

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

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

1st Do the Dist. Prop. $y - (-1) = 2(x - 3)$ → This is the Pt-Slope Form.
 $y + 1 = 2(x - 3)$

But I want it to be in Slope-Int Form
 \therefore get "y" by itself
 $y + 1 = 2x - 6$
 $y = 2x - 7$

Check: use... $(3, 1)$

$$\begin{aligned} -1 &\stackrel{?}{=} 2(3) - 7 \\ -1 &\stackrel{?}{=} 6 - 7 \\ -1 &= -1 \quad \checkmark \end{aligned}$$

O.T.L.

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 →

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