

### Ch 6.5 Point slope form

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

$(x_1, y_1)$  is the given point.       $m$  = slope

Ex1a) (2, -1)  $m = 3$

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Ex1b) (8, -7) and  $m = 0$

Try1. (-3, 10) and  $m = 4$

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Ex2) Use point slope form, then rewrite the equation in slope intercept form.

Ex2a)  $m = 2, (1, 4)$

Ex2b) (4,0)  $m = 1$

Ex 2c) (-1, 1)  $m = -1/8$

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Ex3) Given 2 points write in point slope form. Then in slope intercept.

Rules: 1. Find the slope  $m = \frac{y_1 - y_2}{x_1 - x_2}$

2. Pick one point to sub into point slope.
3. Rewrite in slope intercept.

Ex3a) (5, 12) (6,-2)

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Ex3b) (-4, -1) (-9, -2)

Try 2. (2, 12) (7, 2)

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