May 17 8.3 Point-Slope Form

x_1, y_1

$(1, 2)$ $m = 5$

1. $m = \frac{\Delta y}{\Delta x} = \frac{y_2 - y_1}{x_2 - x_1}$

$(x_2 - x_1)$

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

$(x_2 - x_1)$

$y_2 - y_1 = m(x_2 - x_1)$

$y - 2 = 5(x - 1)$

3. $(-4, 1)$ $m = 1$

$y - 1 = 1(x - (-4))$

$y - 1 = 1(x + 4)$

5. $(-3, -2)$ $m = -3$

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

20) $(\overset{x}{0},\overset{y}{7})$ $m=-1$

$y-7=-1(x-0)$

$+1x$

$y-7=-1x$ $+1x$

$1x+y-7=0$

22. $(\overset{x_1}{5}, \overset{y_1}{4})$ $m = 0$

$y - 4 = 0(x - 5)$

$y - 4 = 0x - 0$

$y - 4 = 0$

25) $(-3, 4)$ $m = \frac{1}{2}$

$y - 4 = \frac{1}{2}(x - (-3))$

$y - 4 = \frac{1}{2}x + \frac{3}{2}$

$\frac{1}{1} \times 2 \quad \frac{4}{1} \times 2$

$\frac{2y - 8}{2} = \frac{1x}{2} + \frac{3}{2}$

$0 = 1x + 3$

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Given (2.8, 960) (4.9, 1680)

$$m = \frac{\Delta y}{\Delta x} = \frac{y_2 - y_1}{x_2 - x_1} = \frac{1680 - 960}{4.9 - 2.8} = \frac{720}{2.1}$$

$$= 342.857 \text{ rounded to } 343 \text{ m/s}$$

HOMEWORK

↳ 3rd Box #s 2, 4, 6, 7

↳ Front of handout