

$$y' = -3.47(x - 7) - 2$$

$$y = y_1 + b(x - x_1)$$

$$y = -2 - 3.47(x - 7)$$

$$-3.47 \quad (7, -2) \quad y = y_1 + b(x - x_1)$$

$$y = 5 - 1.38(x - 2.5)$$

$$-1.38 \quad (2.5, 5)$$

$$s = 3 \quad (2, 5)$$

$$y = 5 + 3(x - 2) \quad y = y_1 + b(x - x_1)$$

$$\text{slope} = -5 \quad (1, -4)$$

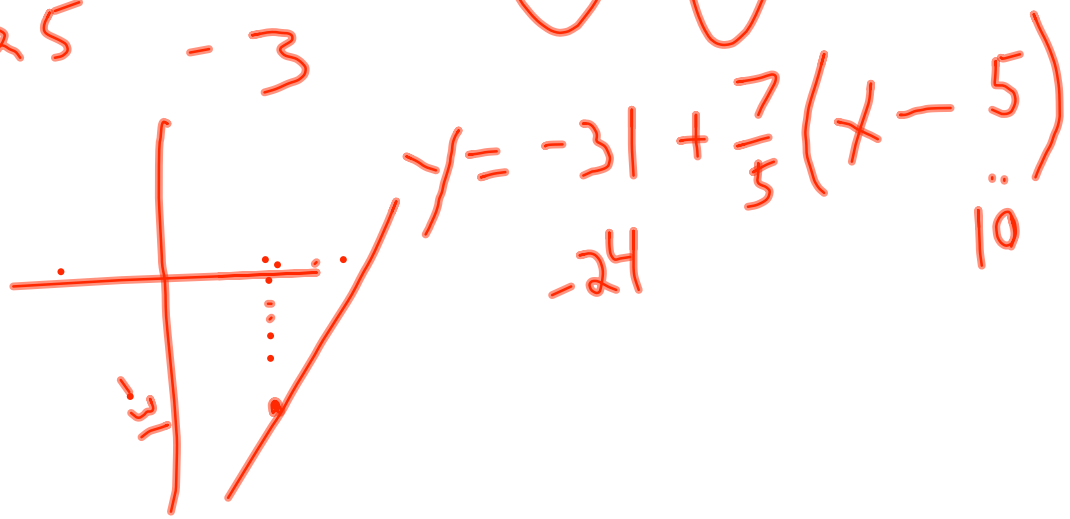
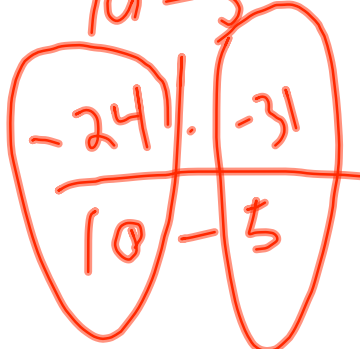
$$y = -4 + -5(x - 1)$$

$$\text{Slope} = -3 \quad (-4; 2)$$

$$y = -2 - 3(x + 4)$$

$$y = -2 - 3(x - (-4))$$

| temp | wind | Slope                        | $\frac{y-Y}{x-X}$ |
|------|------|------------------------------|-------------------|
| 5    | -31  | $\frac{7}{5}$                | $\frac{7}{5}$     |
| 10   | -24  | $\frac{-24 - (+31)}{10 - 5}$ | $\frac{7}{5}$     |
| 15   | -17  |                              | $y = mx + b$      |
| 20   | -10  |                              |                   |
| 25   | -3   |                              |                   |

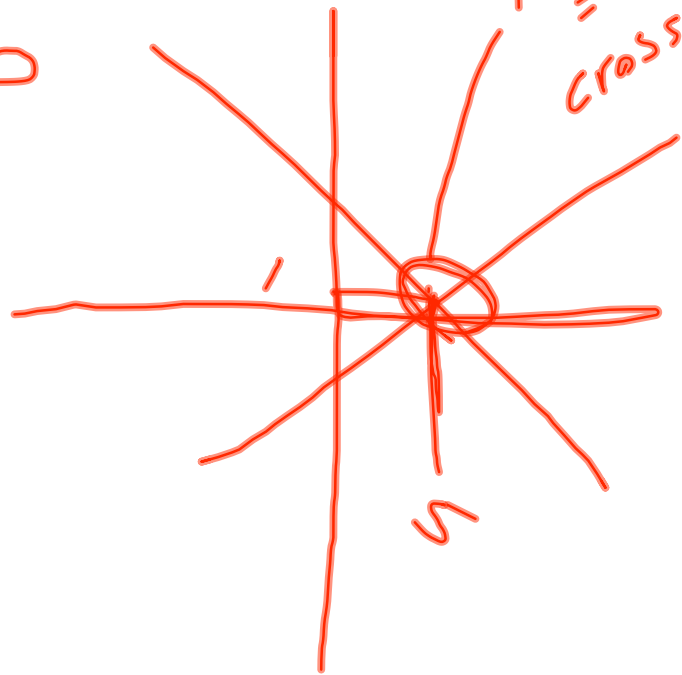


|                      |                                  |          |  |
|----------------------|----------------------------------|----------|--|
| $y = 9 - 2(x + 2)$   | $9 - 2x - 4$                     | $5 - 2x$ |  |
| $y = 0 - 2(x - 2.5)$ | $-2x + 5$                        | $5 - 2x$ |  |
| $y = 7 - 2(x + 1)$   | $7 - 2x - 2$                     | $5 - 2x$ |  |
| $y = -9 - 3(x - 7)$  | $= 9 - 3x + 21$                  |          |  |
|                      | <del><math>-3x + 12</math></del> |          |  |

Solving Systems of Equations.

Substitution Method

$$y = mx + b$$

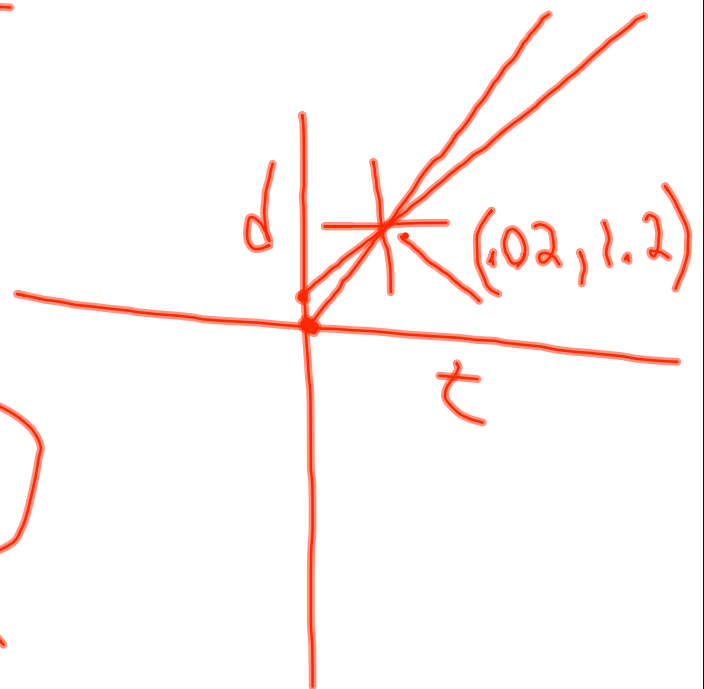


$$d = .2 + 50t = d = 50t + .2$$

$$d = 0 + 60t \quad d = 60t + 0$$

$$d = 50t + .2$$

$$d = 60t$$



$$60t = 50t + .2$$

$$60t = 50t + .2$$

$$\frac{10t}{10} = \frac{.2}{10}$$

$$t = .02 \rightarrow d = 60(.02)$$

$$d = 1.2$$

$$\begin{aligned}d &= 1.5t & (3, 4.5) \\d &= 12 - 2.5t \\+2.5t & & +2.5t \\1.5t &= 12 - 2.5t \\ \frac{4t}{4} &= \frac{12}{4} \\t &= 3 & d = 1.5(3) \\ & & d = 4.5\end{aligned}$$

$$P = -120 + 2.5n$$

$$P = -50 + 1.6n$$

$$\begin{array}{r} +50 \\ -120 + 2.5n = -50 + 1.6n \end{array}$$

$$\begin{array}{r} -2.5n \\ -70 + 2.5n = 1.6n \end{array}$$

$$\frac{-70}{-.9} = \frac{-.9n}{-.9}$$

$$n = 77.78$$

$$P = 74.45$$

Homework

Solve Using Substitution

$$\begin{cases} y = 38 + 2x \\ y = -21 - .5x \end{cases}$$

$$\begin{cases} y = 4 - 3x \\ y = 2x - 1 \end{cases}$$

$$\begin{cases} y = 32 - 3x \\ y = 15 + x \end{cases}$$

$$\begin{cases} 2x - 2y = 4 \\ x + 3y = 1 \end{cases}$$

$$\begin{cases} y = 2.3 + 3.2x \\ y = 5.9 + 3.2x \end{cases}$$

$$\begin{cases} d = 8.5 - .5t \\ d = 2.5 + .75t \end{cases}$$

$$\begin{cases} y = 25 + 30x \\ y = 15 + 32x \end{cases}$$