

Review

Dec. 07, 2006

Slope-Intercept form:

$$y = mx + b$$

You need/have: Slope + y-int.

Point-Slope Form:

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

You need/have: Slope + a
Pt. on the line

Standard Form:

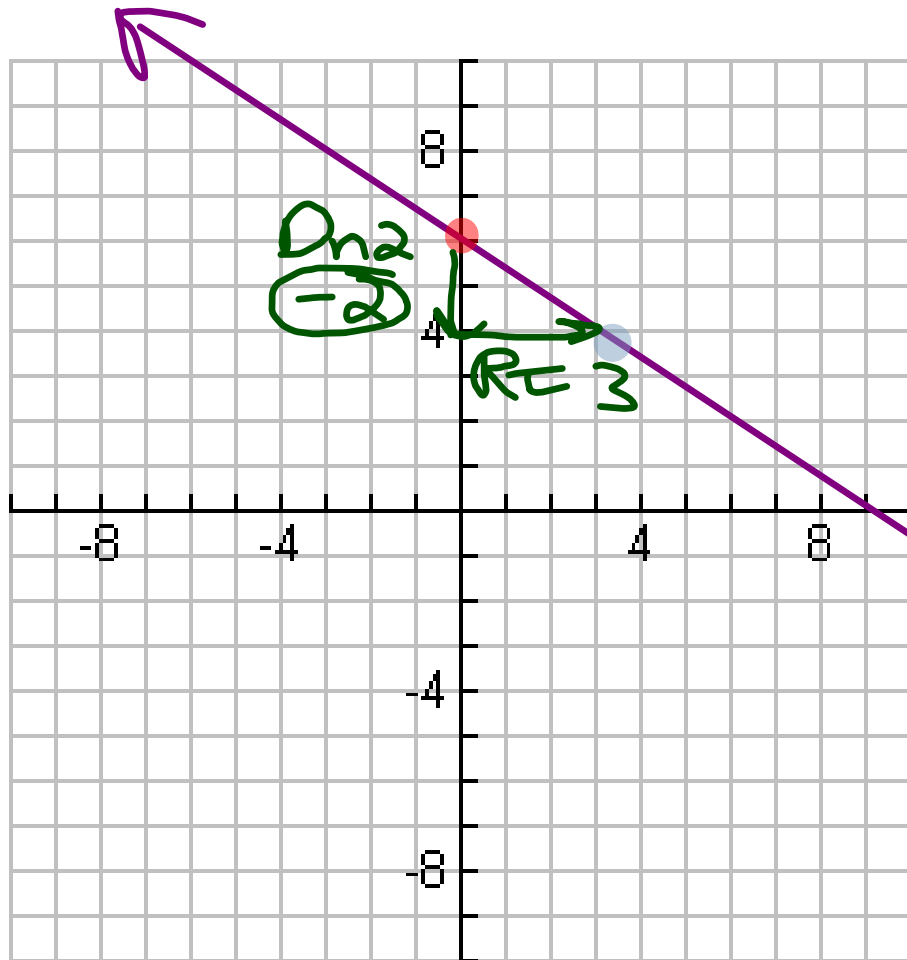
$$Ax + By = C$$

A + B are both not Zero

A + B are Integers Coefficients

* \perp m are opp. rec.

// m are the same



S-I-F
of the eq:

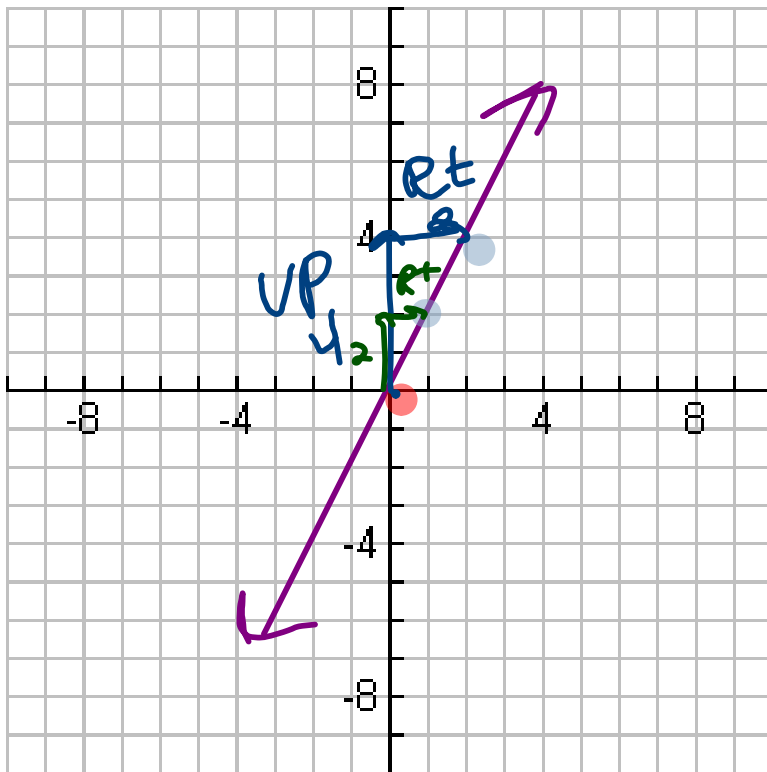
$$y = mx + b$$

$$m = \frac{-2}{3}$$

$$y\text{-int} = \underline{6}$$

$$m = \frac{\text{rise}}{\text{run}} = \frac{-2}{3}$$

$$y = \frac{-2}{3}x + 6$$



S-I-F

$$m = \underline{\hspace{2cm}}$$

$$y\text{-int} = \underline{0}$$

$$m = \frac{\text{rise}}{\text{run}} = \frac{4}{2} = \underline{\underline{2}}$$

$$m = \frac{\text{rise}}{\text{run}} = \frac{2}{1} = \underline{\underline{2}}$$

$$y = mx + b$$

$$y = 2x + 0$$

$$\underline{\underline{y = 2x}}$$

Write in S-I-F

$$m = -\frac{1}{4}$$

$$+ b = 3$$

Write the
g.e.

$$y = mx + b$$

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

$$\text{Slope} = 0$$

$$y\text{-int} = -\frac{5}{2}$$

$$y = mx + b$$

$$y = 0x + \frac{-5}{2}$$

$$y = -\frac{5}{2}$$

Write in S-I-F

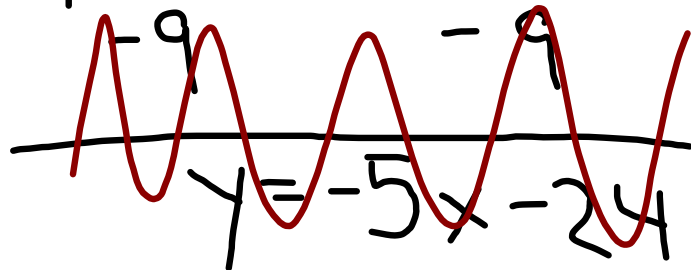
$$(3, -9) \quad m = -5$$

x_1, y_1

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

$$y - (-9) = -5(x - 3)$$

$$y + 9 = -5x - 15$$


$$y = -5x - 24$$

$$\rightarrow y + 9 = -5x + 15$$

$$\underline{\underline{y = -5x + 6}}$$

Write in S-I-F

$$(0, -5)$$

$$m = \frac{8}{3}$$

$$y = mx + b$$

$$y = \frac{8}{3}x - 5$$

write in S-F a line \perp to
 $y = -\frac{1}{3}x + 5$ & goes through

Pt $(6, 9)$ $m = \perp$ to $-\frac{1}{3}$
 x, y $m = 3$

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

$$y - 9 = 3(x - 6)$$

$$y - 9 = 3x - 18$$

$$y = 3x - 9$$

$$\begin{array}{r} -3x \quad -3x \\ \hline -3x + y = -9 \end{array}$$

$$A = -3$$

$$B = 1$$

$$C = -9$$

Write in S-F a line that
is parallel to $y = -\frac{1}{5}x + 3$
& goes through $(4, 2)$

$m = //$ to $-\frac{1}{5}$, so... x_1, y_1

$$\underline{\underline{m = -\frac{1}{5}}}$$

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

$$y - 2 = -\frac{1}{5}(x - 4)$$

$$5(y - 2) = \left(-\frac{1}{5}x + \frac{4}{5}\right)5$$

$$5y - 10 = -1x + 4$$

$$\begin{array}{r} 5y - 10 = -1x + 4 \\ +10 \qquad \qquad +10 \\ \hline 5y = -1x + 14 \end{array}$$

$$\begin{array}{r} 5y = -1x + 14 \\ +1x \qquad \qquad +1x \\ \hline 1x + 5y = 14 \\ \underline{\underline{\hspace{1.5cm}}} \end{array}$$

$$\begin{array}{l} A = 1 \\ B = 5 \\ C = 14 \end{array}$$

O.T.L.

① ^{pg 317} 1, 7, 14, 20, 23, 26 } Due w/
Test

② Study for Test Tomorrow

— All 3 Quizzes from Book

— Ch. 5 Test Pg 317