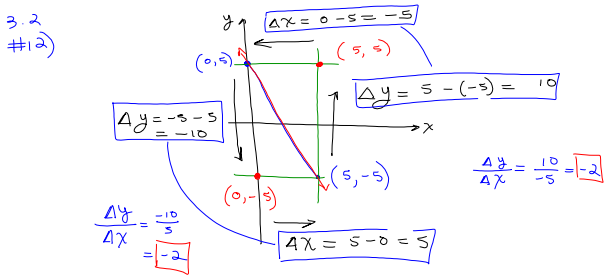
February 6, 2015

3.2 #12)



Feb 6-10:52 AM

#5) $\left(\frac{6}{7}, 3\right)$ & $\left(-\frac{2}{3}, \frac{1}{4}\right)$

① Pos

② $m = \frac{\left(\frac{1}{4}\right) - \left(\frac{3}{1}\right)}{\left(-\frac{2}{3}\right) - \left(\frac{6}{7}\right)}$

$= \frac{\frac{1-12}{4}}{\frac{-14-18}{21}}$

$= \frac{-\frac{11}{4}\ K}{-\frac{32}{21}\ F}$

$= -\frac{11}{4} \cdot -\frac{21}{32} = \frac{231}{128}$

Feb 6-11:22 AM

$-(-a) = (-1)\cdot(-a)$

$= a$

Feb 6-11:27 AM

$(-6, 7)$; $m = \frac{5}{3}$

$(-6+3, 7+5)$

$(-3, 12)$

$\frac{7-?}{-6-?} = \frac{5}{3}$

$\frac{2}{-9}$

$\frac{5}{3} = \frac{7}{-6}$

Feb 6-11:28 AM

$(-6, 7)$ $m = \frac{5}{3}$

$y - 7 = \frac{5}{3}(x + 6)$

$y - 7 = \frac{5}{3}x + 10$

$y = \frac{5}{3}x + 17$

Feb 6-11:36 AM

$(-6, 7)$ $m = \frac{3}{5}$ $(9, 2)$

$(9,2)$ $\frac{7-2}{-6-9} = \frac{5}{-3}$

$7 - x = 5$

$7 - 5 = x$

$2 = x$

$-6 - x = 3$

$-6 - 3 = x$

$-9 = x$

Feb 6-11:32 AM

Forms of Linear Equations

① Standard Form

$ax + by = c$

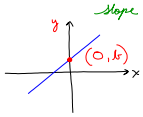
* where $a, b, c \in \mathbb{Z}$ i.e not fractions

② Slope - Intercept Form

$y = mx + b$

m: Slope

b: y-Intercept $(0, b)$



③ Point - Slope Form

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

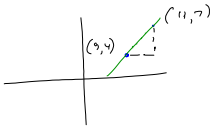
* where (x_1, y_1) is a given point.

Feb 6-11:40 AM

Read & Start 9.1 COS

Feb 6-11:48 AM

$(9, 4)$ $m = \frac{3}{2}$



$(9+2, 4+3)$

$(11, 7)$

$\rightarrow \frac{4-x}{9-x} = \frac{3}{2}$

$(7, 1)$

$(7+2, 1+3)$

$(9, 4)$

$4 - x = 3$

$-4 \quad -4$

$-x = -1$

$x = 1$

$4 - x = 3$

$-3 + x \quad -3 + x$

$4 - 3 = x$

$1 = x$

Feb 6-11:52 AM

LCD: $(9-x)(2)$

$(9-x)(2)\left[\frac{4-x}{9-x} = \frac{3}{2}\right]$

$2(4-x) = (9-x)(3)$

$8 - 2x = 27 - 3x$

$-8 + 3x \quad -8 + 3x$

$x = 19$

Feb 6-11:58 AM