Monday

Review for Ch5 Test

March 26, 2007

First: Be Sure to turn in today right Now! the 5.3 wk.st.

- Make Sure You Staple your work to the wk.st.
- Your name is on every piece of paper!
- & the Answers are re written on the wk.st.

Know your terms.

G.E = Generic Equation

S.I.F. = Slope-Intercept Form.

P.S.F. = Point-Slope Form.

S.F. = Standard Form.

$\perp$ = Perpendicular Slopes

$//$ = Parallel

What is the G.E. for the S.I.F.?

$y = mx + b$

What are the two things you have/need for the S.I.F.?

Slope & y-intercept

Tuesday

What is the G.E. for the P.S.F.?

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

What are the two things you have/need for the P.S.F.

Point on the line & Slope

What is the G.E. for the S.F. ?

$Ax + By = C$

Where A & B are both not zero

A & B are called Integer Coefficients

Perpendicular Slopes are

opposite reciprocal

Parallel Slopes are

the Same / equal

Write in S.I.F.; Be sure to show All work; & the G.E.

$y = mx + b$

① Slope $= -3$, y-intercept $= 1$

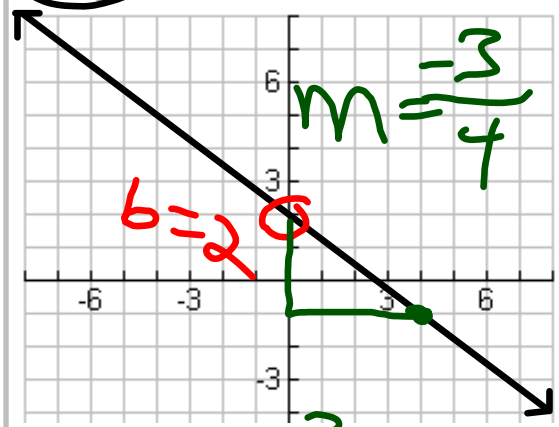
$y = -3x + 1$

② y-intercept $= \frac{7}{3}$, Slope $= 0$

$y = 0x + \frac{7}{3}$

$y = \frac{7}{3}$

③



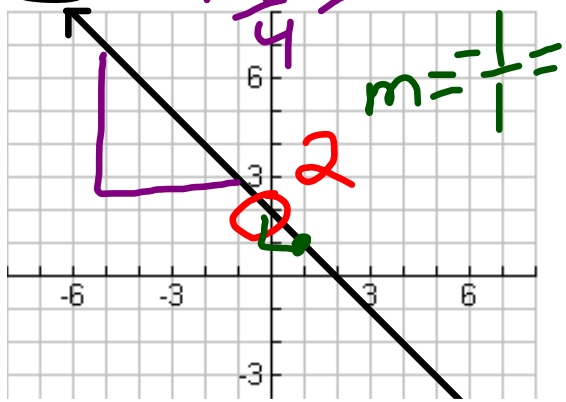
$m = \frac{-3}{4}$

$b = 2$

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

④

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

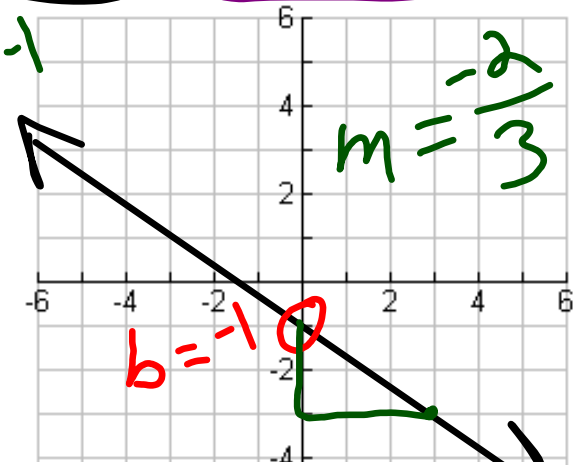


$m = \frac{-1}{1} = -1$

2

$y = -1x + 2$

⑤



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

$b = -1$

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

Wednesday

Write in P-S-F. the Equation w/ the given Slope Passing through the given Point

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

① $(8, 8)$, $m = -4$

$$y - 8 = -4(x - 8)$$

② $(-9, -3)$, $m = 4$

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

$$y + 3 = 4(x + 9)$$

③ $(0, 0)$, $m = -\frac{3}{4}$

$$y - 0 = \frac{-3}{4}(x - 0)$$

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

Write in S-I-F the Equation
$y=mx+b$
w/ the given Slope Passing through the given point.

① $(3,4)$, $m=1$

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

$y-4=1(x-3)$

$y-4=1x-3$

$+4 \quad +4$

$y=1x+1$

② $(-7,5)$, $m=0$

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

$y-5=0(x-7)$

$y-5=0$

$+5 \quad +5$

$y=5$

③ $(1,-5)$, $m=-5$

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

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

$y+5=-5x+5$

$-5 \quad -5$

$y=-5x$

Thursday Write in S-IF. the equation parallel to the given line & passing through the given point

① $y = 5x + 2$, $(1, 0)$

$m = 5$

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

$y - 0 = 5(x - 1)$

$y = 5x - 5$

② $y = \frac{2}{3}x + 3$, $(4, 2)$

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

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

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

$y - 2 = \frac{2}{3}x - \frac{8}{3} + \frac{6}{3}$

$+\frac{6}{3}$

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

$\frac{2}{3}(4)$

$\frac{2}{3} \cdot \frac{4}{1} = \frac{8}{3}$

$-\frac{8}{3} + \frac{2}{1}$

$-\frac{8}{3} + \frac{6}{3} = \frac{-2}{3}$

Thursday Write in S-F the equation parallel to the given line & passing through the given point

① $y=-2x+5$, $(0,6)$

$m=-2$

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

$y-6=-2(x-0)$

$y-6=-2x$

$+2x \qquad +2x$

$2x+y-6=0$

$+6 \quad +6$

$2x+y=6$

② $y=\frac{1}{6}x+3$, $(-6,-6)$

$m=\frac{1}{6}$

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

$y-{}^{-}6=\frac{1}{6}(x+{}^{-}6)$

$6(y+6)=\left(\frac{1}{6}x+1\right)6$

$6y+36=1x+6$

$-x \quad -36 \quad -x \quad -36$

$-x+6y={}^{-}30$

Thursday Write in S-I-F the equation perpendicular to the given line & passing through the given point

① $y=-5x+6$, $(0,6)$

$m=\frac{1}{5}$ $y-y_1=m(x-x_1)$

$y=mx+B$

② $y=\frac{1}{7}x$, $(2,-1)$

$m=-7$ $y-y_1=m(x-x_1)$

$y=mx+b$

Thursday Write in S-F the equation Perpendicular to the given line & Passing through the given point

① $y = 7x + 1$, $(2, 1)$

$m = -\frac{1}{7}$ $y - y_1 = m(x - x_1)$

$Ax + By = C$

② $y = -\frac{1}{4}x - 3$, $(7, 7)$

$m = 4$ $y - y_1 = m(x - x_1)$

$Ax + By = C$