Problems with homework?

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#4, 5, 6, 7, 8, 12, 13, 22, 23

13. a) $4x+y-10=0$ $y=mx+b$

$y=-4x+10$

$m=-4$

b) $3x-y+33=0$

$-y=-3x-33$

$y=3x+33$

$m=3$

d) $10x+2y-16=0$

$\frac{2y}{2}=-\frac{10}{2}x+\frac{16}{2}$

$y=-5x+8$

$m=-5$

#22 a) $2x+3y-6=0$

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

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

Slope negative

y-int = 2

Graph B.

b) $2x-3y+6=0$

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

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

m = positive

y-int 2

$(0,1)\ (3,-8)$

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

$=\frac{1-(-8)}{0-3}$

$=\frac{9}{-3}$

$=-3$

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

$y=mx+b$

$\boxed{y=-3x+1}$

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Check Up... Finding the Equation of a Line

#1. Determine the equation of the line given that...
(Put equations in slope-y-intercept Form)

a) the line passes through the points (-3, 5) & (-2, -7)

$m = \frac{y_2 - y_1}{x_2 - x_1}$ $y - y_1 = m(x - x_1)$

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b) the line passes through the point (-2, 3) has the same slope as the line 3x - 2y -5 =0

c) the line has an x-intercept of 4 and a y-intercept of -3

d) passes through the point (-3,0) and is perpendicular to the line 3x-12y+2=0

#2. Determine the equation of each of the following lines...

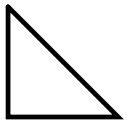
(Express equations in GENERAL FORM)

a) passing through the ordered pair (-2, 3) and with slope 5/3

b) passing through the ordered pairs (6, -1) and (0, -3)

c) passing through the point (1, 2) and parallel to the line 2x - 5y +1 =0

#3. Show that the triangle whose vertices have the coordinates (3, 3), (8, 17) & (11, 5) is a right triangle.



Attachments

Worksheet - Equation of a Line.pdf

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