10D

Feb 8/2007

p24 q7

209 = x + y

x: # of adults

y: # of students

more than twice

$y = 23 + 2x$

sub in (y)

$209 = x + (23 + 2x)$

$$209 = x + 23 + 2x$$

$$209 = 3x + 23$$

$$209 - 23 = 3x$$

$$\frac{186}{3} = \frac{3x}{3}$$

$$x = 62$$

$$209 = x + y$$

$$209 - 62 = y$$

$$y = 147$$

$\therefore$ 62 adult & 147 students were sad.

p24 q5 g

$$\frac{(4x-1)}{5} = \frac{(2x+3)}{2}$$

$$2(4x-1) = 5(2x+3)$$

ok

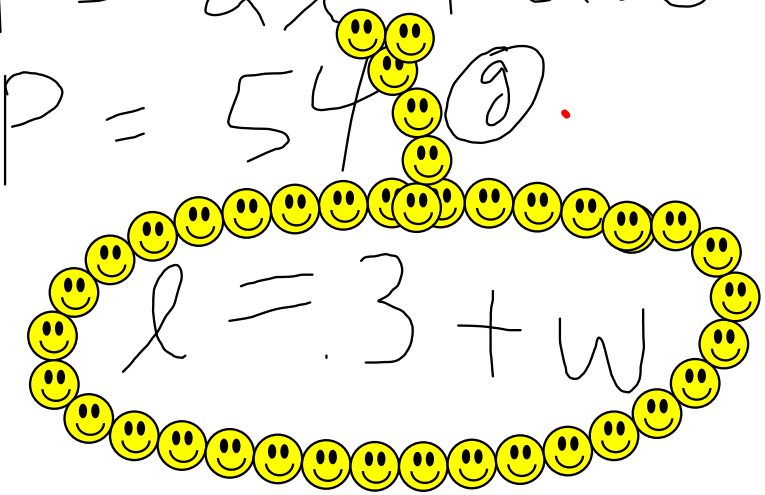
S1 - cross multiply
S2 - expand
S3 - collect
S4 - isolate

q 8

p 24

$P = 2l + 2w$?

$P = 54$ @.



$54 = 2(3+w) + 2w$

$54 = 2(3+w) + 2w$

expand

$54 = 6 + 2w + 2w$ collect

$54 - 6 = 4w$

$\frac{48}{4} = \frac{4w}{4}$

$w = 12$

$\therefore l = 12 + 3$

$l = 15$

$w = 12 \quad l = 15$

check

$P = 54$

$P = 2(15) + 2(12)$

$P = 30 + 24$

$P = 54$

Write Equations of lines p. 28

$$y = mx + b$$

slope $= m = \frac{\Delta y}{\Delta x} = \frac{y_2 - y_1}{x_2 - x_1}$

$(0, b)$

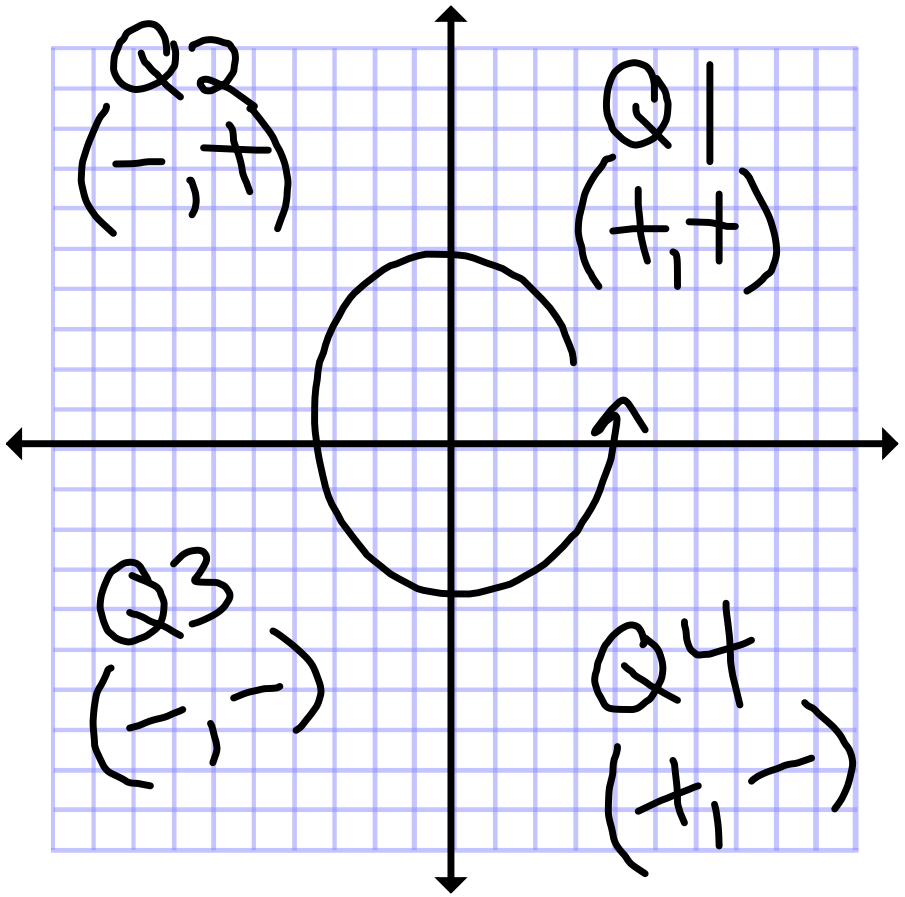
S1

find slope?

$(6,3)$ & $(-2,-5)$

$$m = \frac{-5-3}{-2-6}$$

$$m = \frac{-8}{-8} = 1$$



(S2) find "b"

$y = mx + b$

So far $y = 1x + b$

use $(6, 3)$

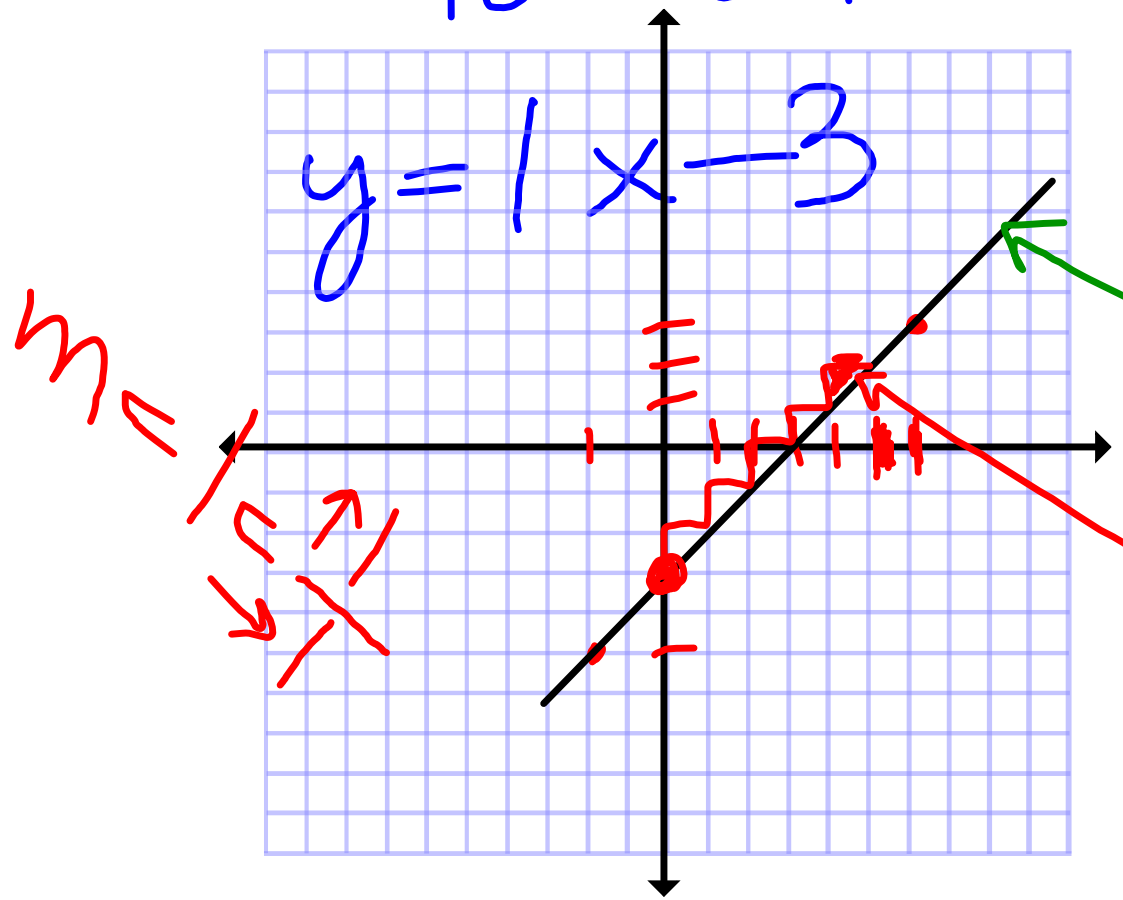
$3 = 1(6) + b$

$3 = 6 + b$

$b = 3 - 6$

$b = -3$

(S3) use "m" & "b" to write eg.



y = x − 3
or
y = x + (−3)

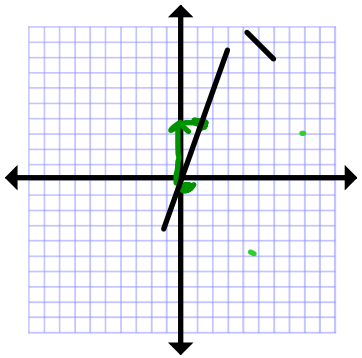
y = x − 3

rate triangle

Write eqs

a) $m = 4 \quad b = -1$

$y = 4x - 1$



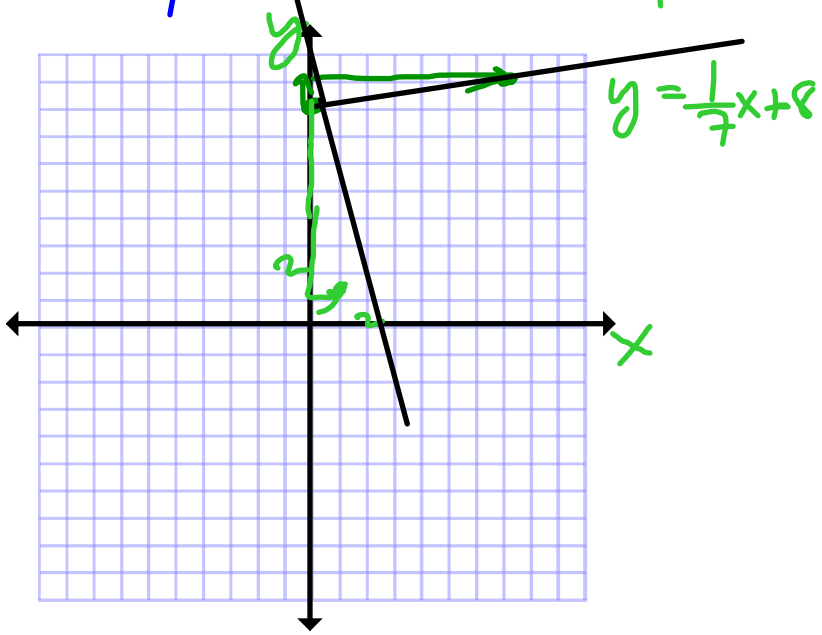
b) $m = \frac{1}{7} \quad b = 8$

$y = \frac{1}{7} + 8$

$m = 4$

$m = \frac{14}{7}$

$m = \frac{-7}{7}$



$m = \frac{1}{7}$

$b = 8$

parallel lines have the same slope

perpendicular lines have negative reciprocal slopes

$\frac{a}{b} \rightarrow \frac{-b}{a}$

$m_1 = \frac{1}{7}$

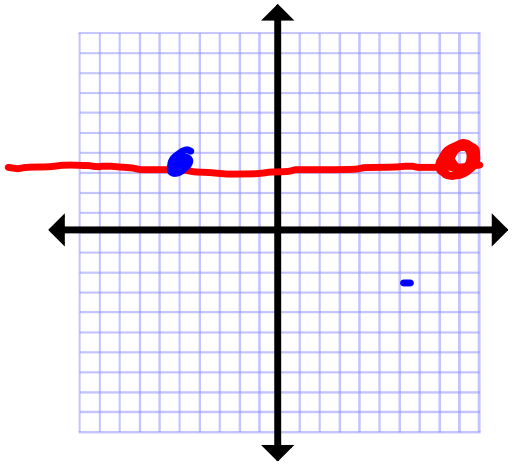
$m_2 = \frac{-7}{1}$

$m_2 = \frac{7}{-1}$

horizontal lines

$y = 3$

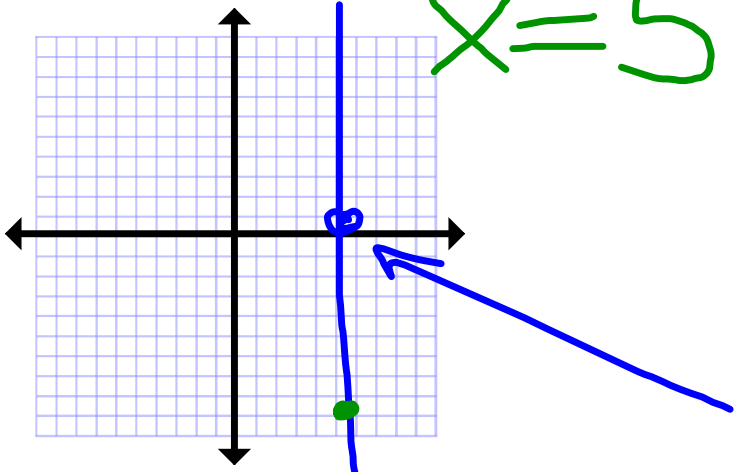
$m = 0$



(9, 3)

(-5, 3)

$y = 3$



$x = 5$

$m = \text{UD}$

$(5, 0)$

$(5, -9)$

Vertical lines

P 28
9
#1-6
odd
letters