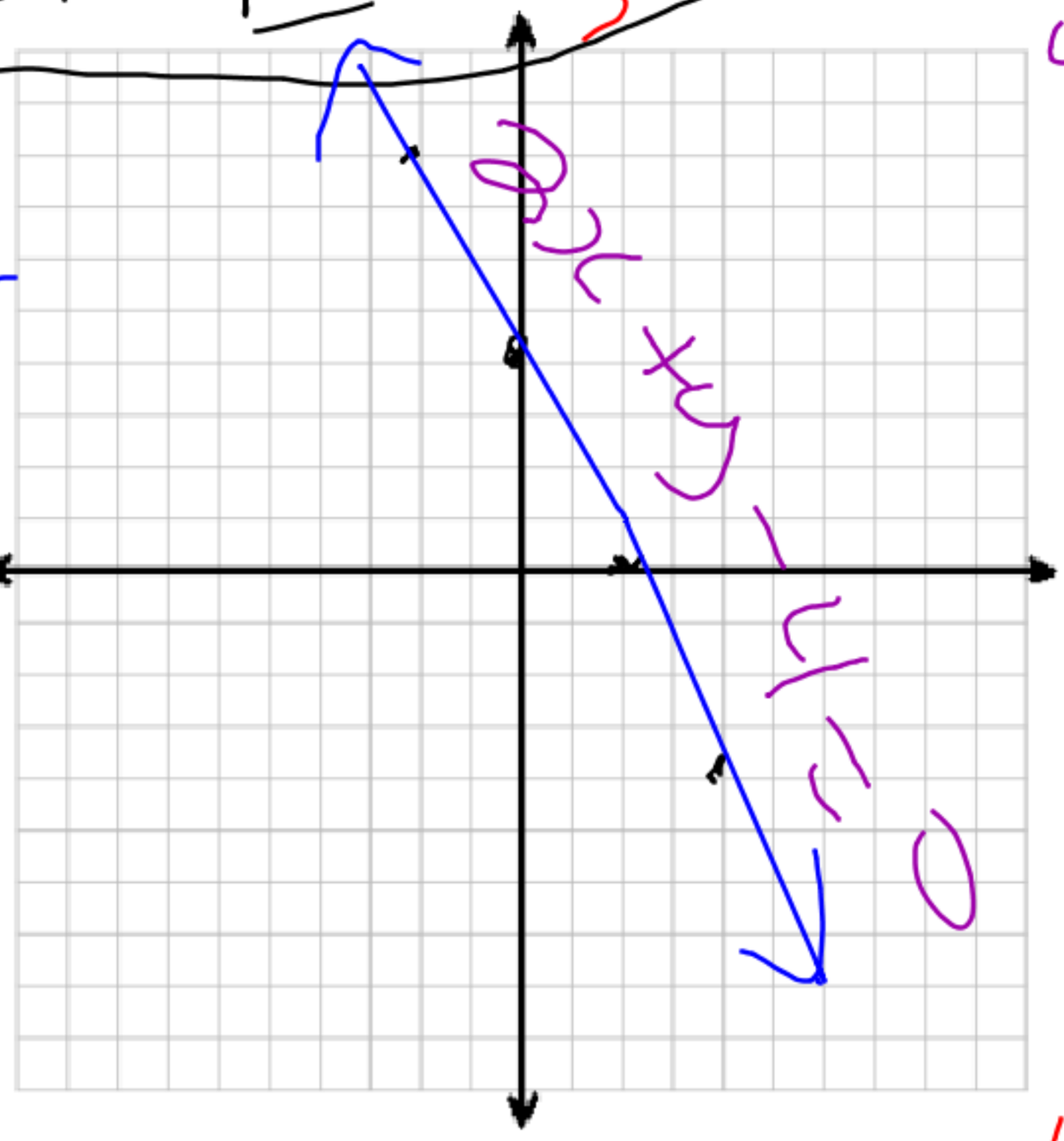
June 3rd P.432

Methods of Graphing

4. $2x+y-4=0$

to find the x-intercept $y=0$

x	y
2	0
0	4



x $2x+y-4=0$

$+4 \quad +4$

$2x+0-4=0$

$\frac{2x}{2}=\frac{4}{2}$

$x=2$

$\therefore$ the x-intercept is $(2,0)$

to find the y-intercept, $x = 0$

$$2x + y - 4 = 0$$

$$+4 \qquad +4$$

$$2(0) + y - 4 = 0 + 4$$

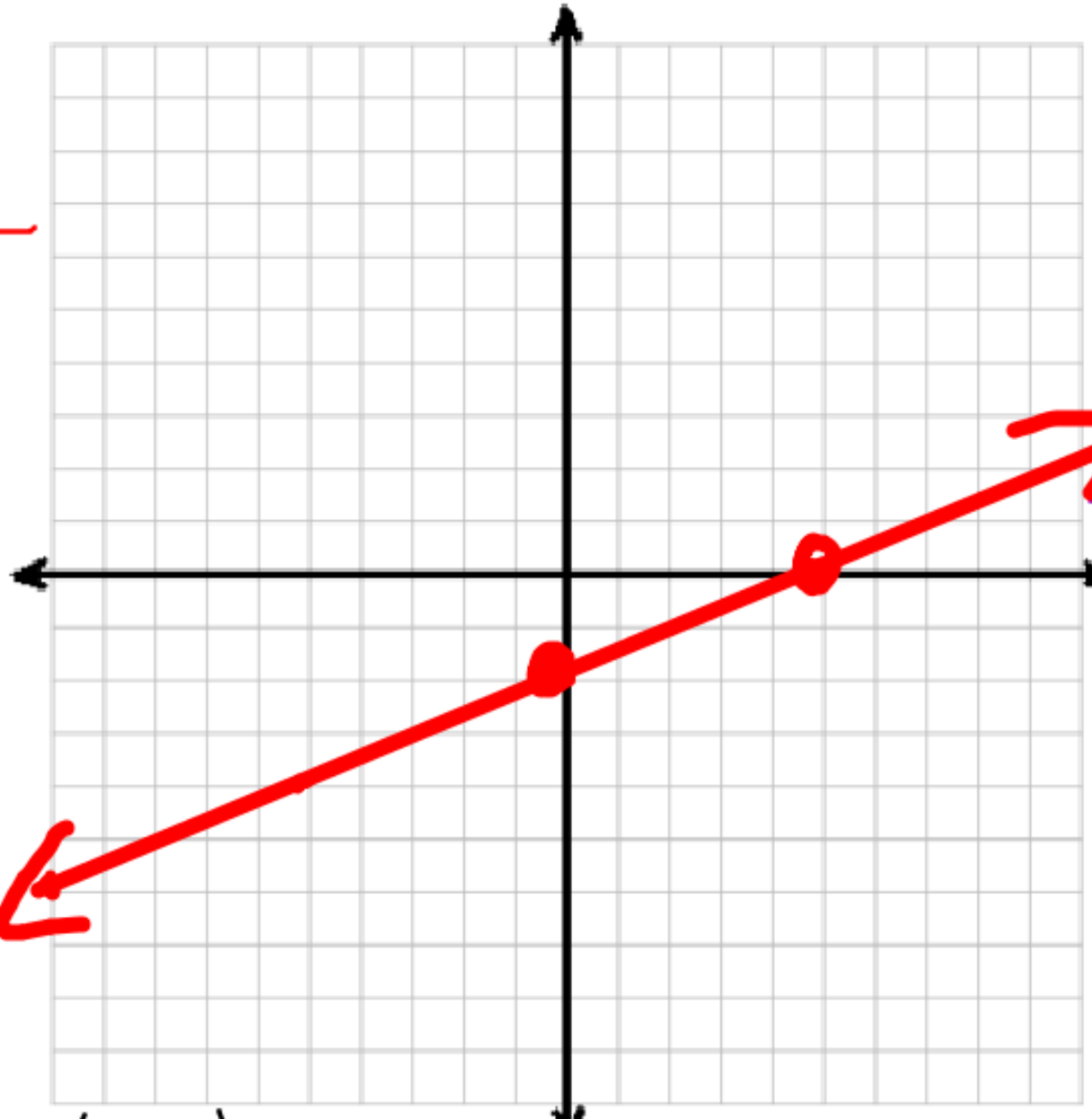
$$y = 4$$

$\therefore$ the y-intercept is $(0, 4)$

5

$$2x-5y=10$$

x	y
5	0
0	-2



To find the x intropt $y=0$

$$2x-5(0)=10$$

$$\frac{2x}{2}=\frac{10}{2}$$

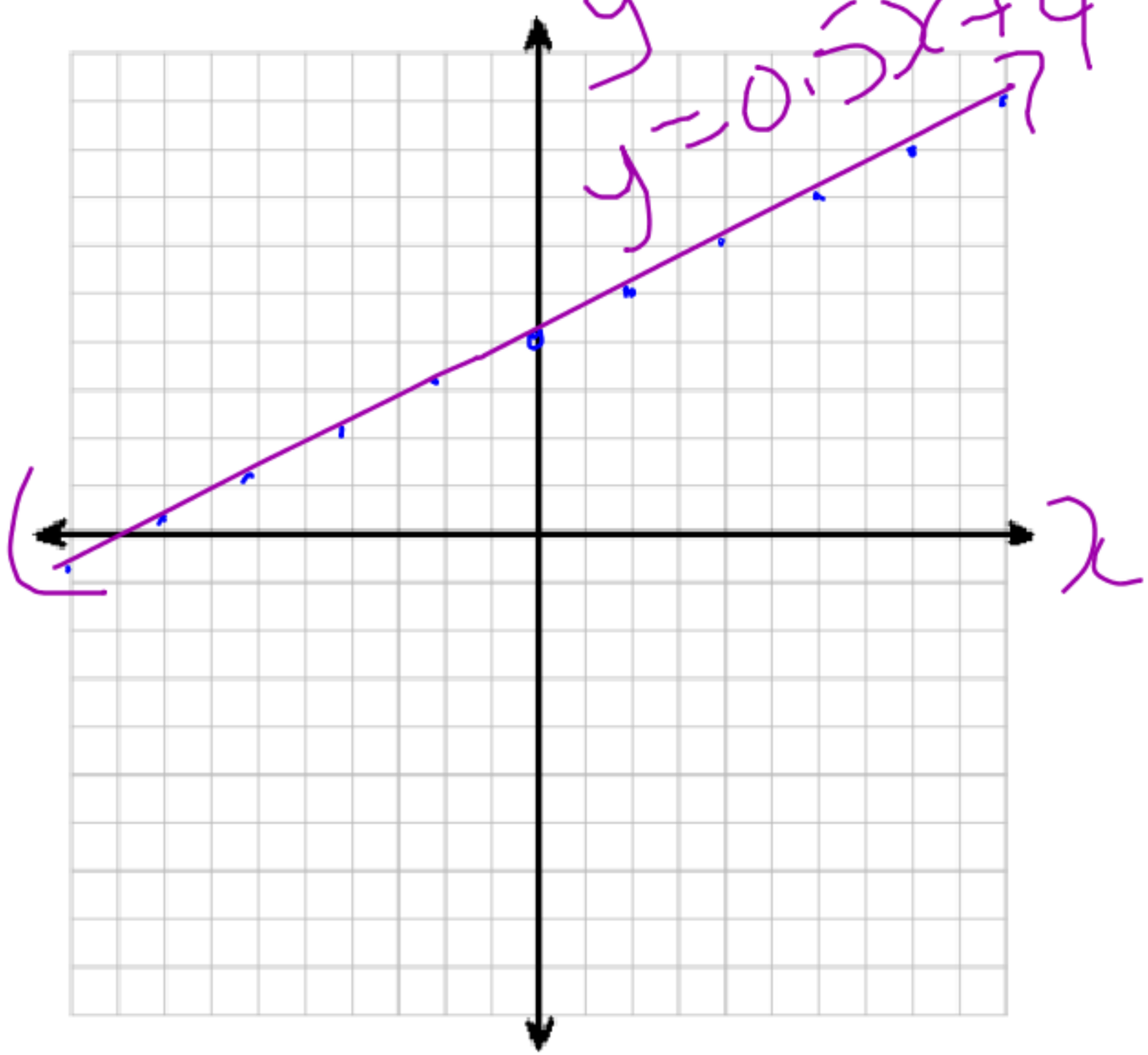
$$x=5$$

To find intercept the y $x=0$

$$2(0)-5y=10 \Rightarrow \frac{-5y}{-5}=\frac{10}{-5} \Rightarrow y=-2$$

10

$y = 0.5x + 4$



$y = mx + b$

$m = 0.5$

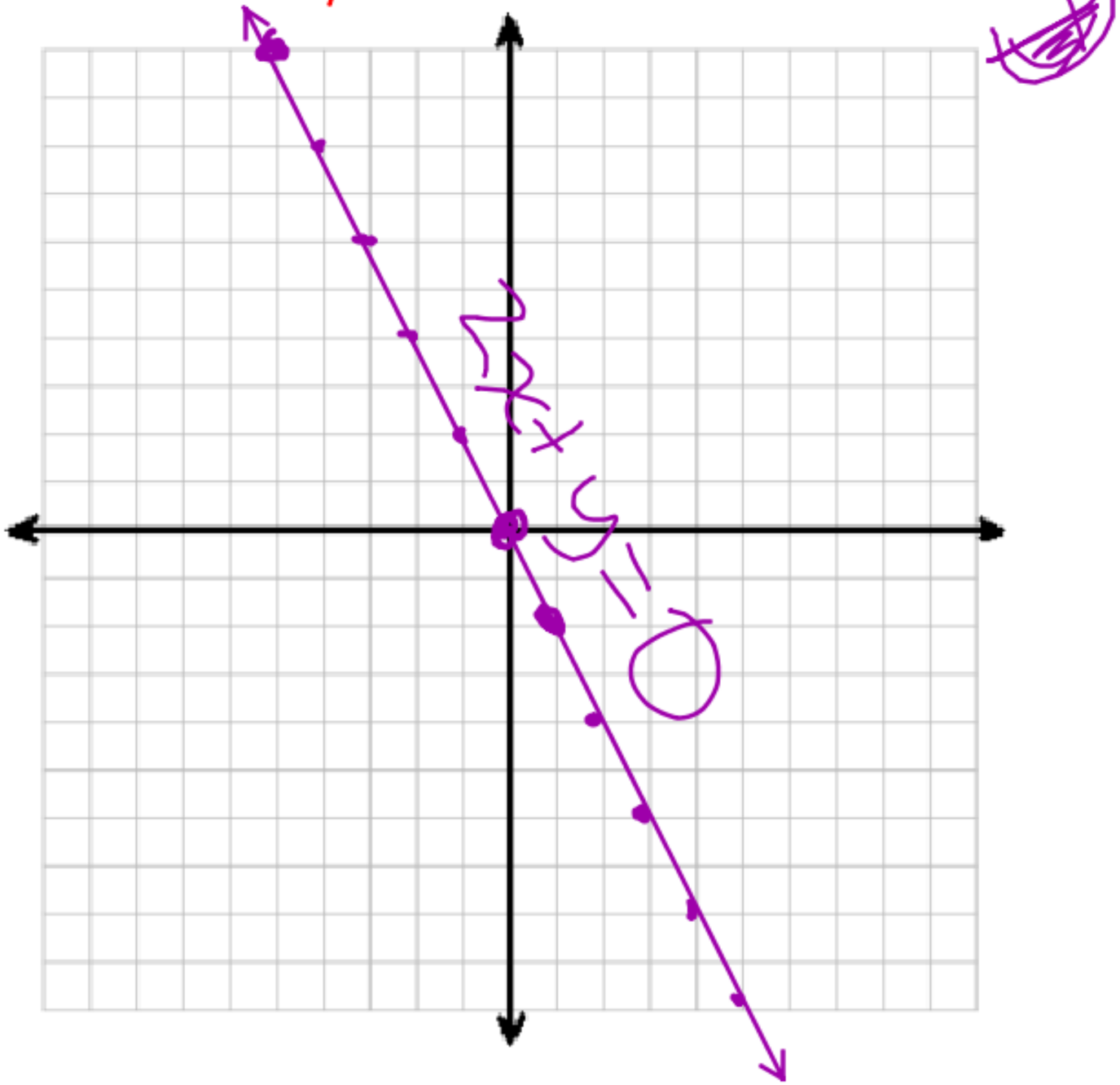
$= \frac{1}{2}$

$b = 4$

13

$2x + y = 0$

$-2x \quad -2x$



$y = mx + b$

$y = -2x + 0$

$m = -2$

$b = 0$

(14) $x + 2y - 6 = 0$ $\quad y = 0$

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

$x - 6 = 0 + 6$

$+6$

$x = 6$

$x + 2y - 6 = 0$

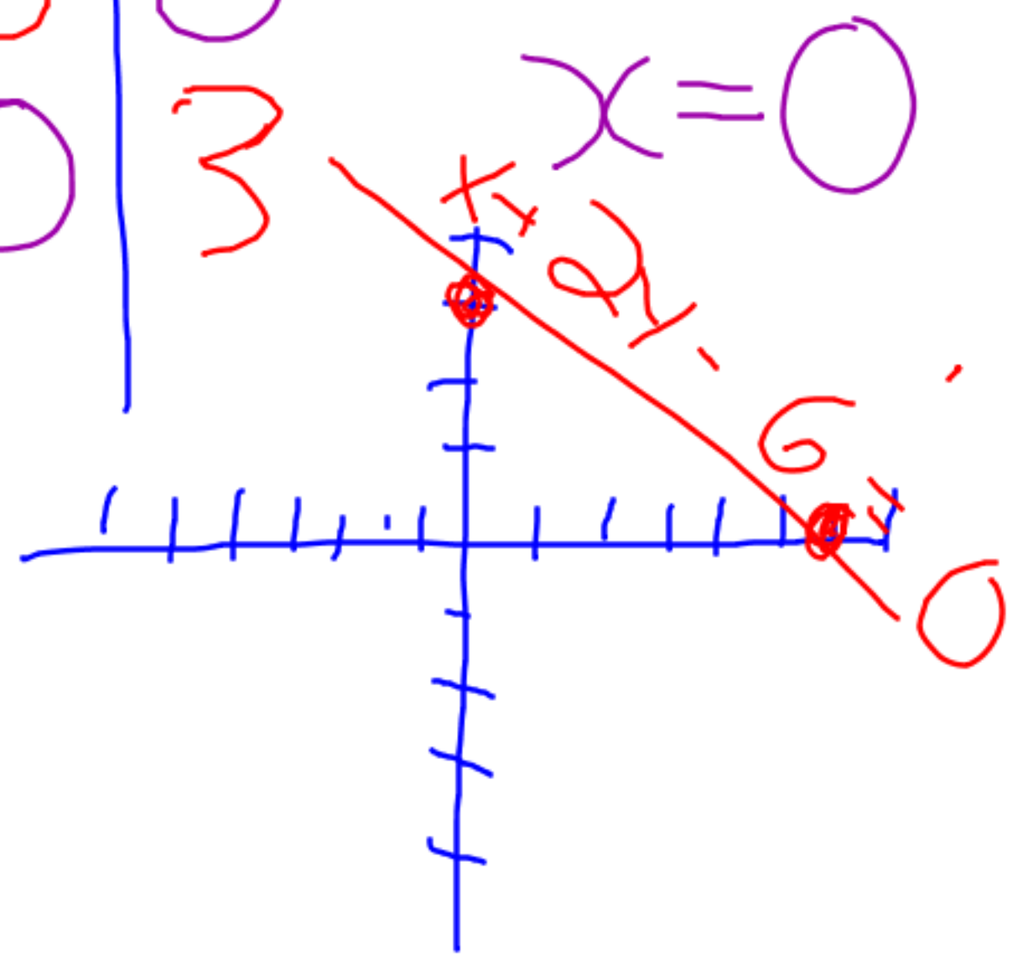
$(0) + 2y - 6 = 0$

$2y - 6 = 0 + 6$

$\times 6$

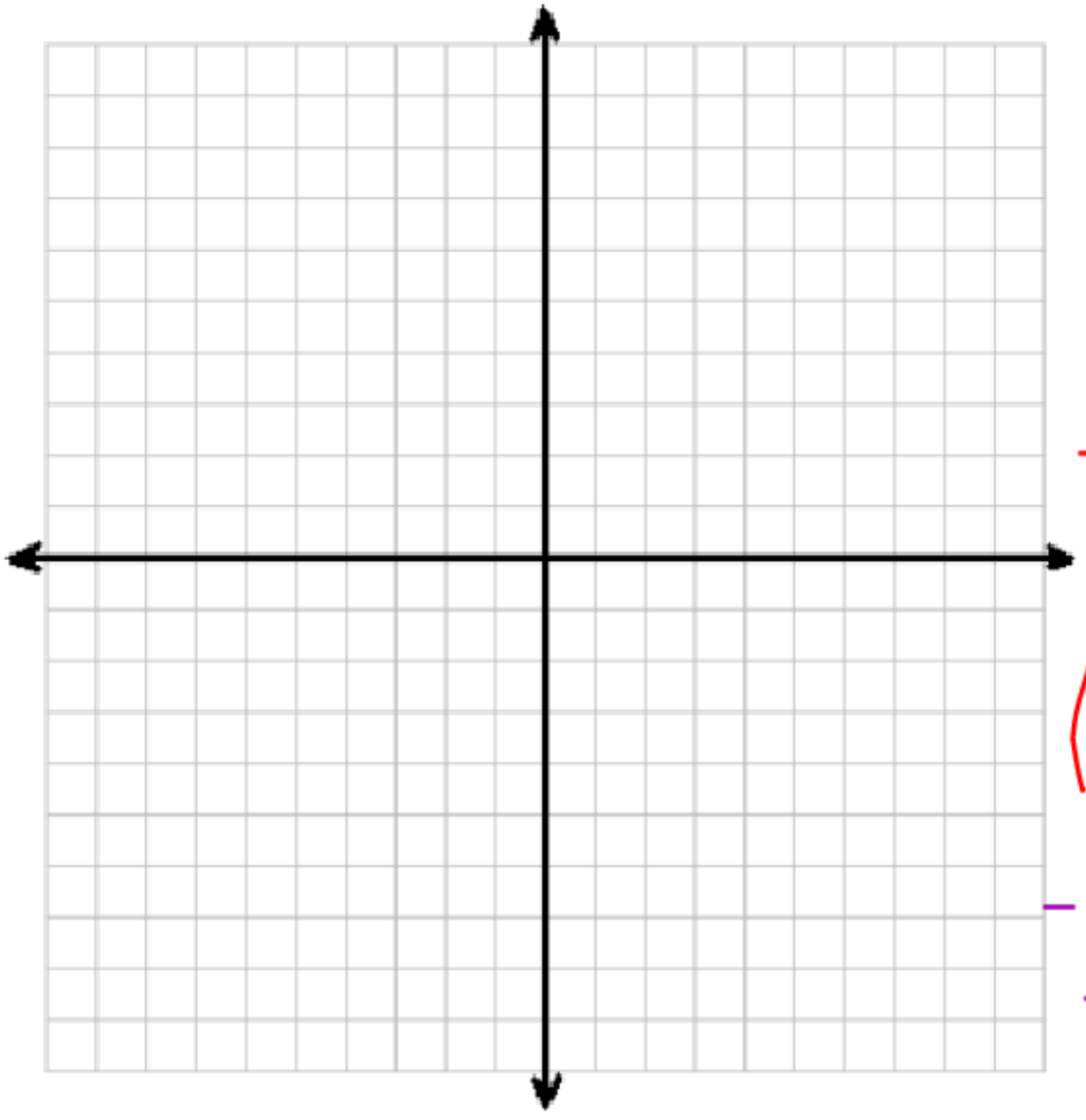
$\frac{2y}{2} = \frac{6}{2}$ $\quad \therefore y = 3$

X	Y
6	0
0	3



17

$y = 2(x-3)$



$x = 0$

$y = 2x - 6$

$y = 2(0) - 6$

$y = -6$

$y = 0$

$y = 2x - 6$

$\frac{0}{2} = \frac{2x}{2} - \frac{6}{2}$

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

$x = 3$

3. $x + 2y = 8$
4. $2x + y - 4 = 0$
5. $2x - 5y = 10$
6. $5x - 4y + 20 = 0$
7. $x - y - 3 = 0$
8. $x - 3y + 6 = 0$

Graph each equation using the slope and y-intercept.

9. $y = 3x - 2$
10. $y = 0.5x + 4$
11. $y = -4x - 1$
12. $y + 3 = \frac{1}{3}x$
13. $2x + y = 0$
14. $x + 2y - 6 = 0$

Graph using a method of your choice. Find the intercepts and slope for each line. The domain is R.

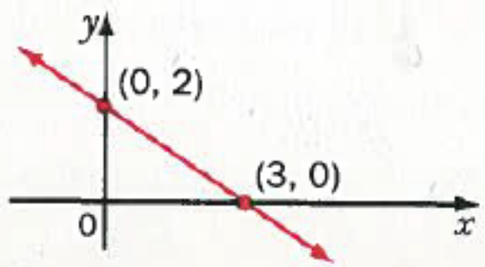
15. $y = 3x - 9$
16. $5x + y + 5 = 0$
17. $y = 2(x - 3)$
18. $y + 4 = \frac{1}{2}x$

19. $y = -\frac{1}{3}x + 2$
20. $y + 2 = -(x + 1)$

21. $\frac{x}{3} + \frac{y}{2} = 2$
22. $3x - 4y = -24$

Find an equation for each of the following lines.

23.



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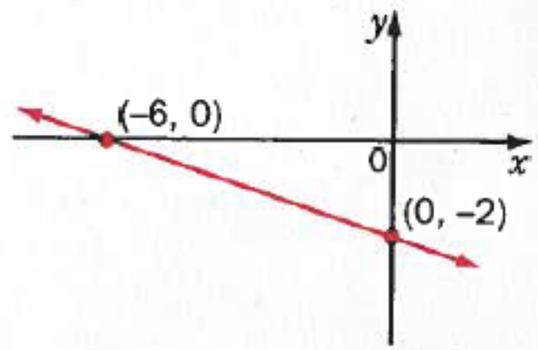

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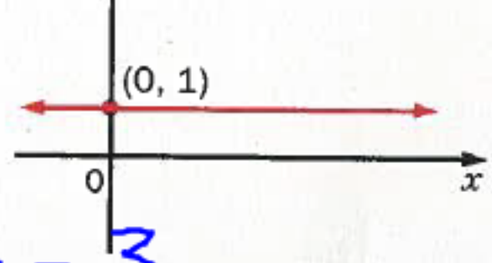
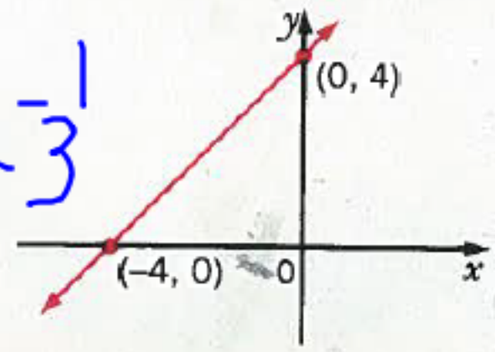


27.



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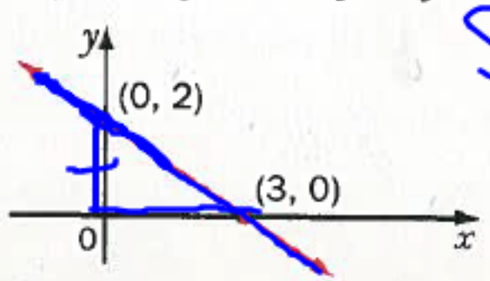

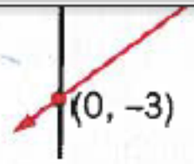

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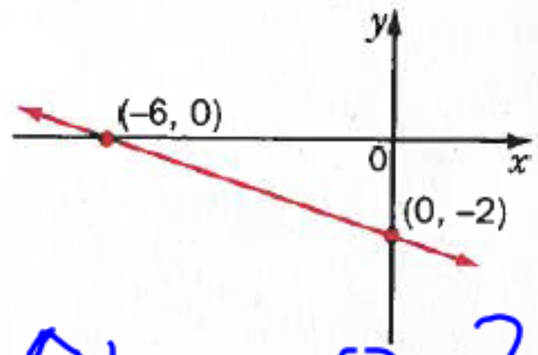

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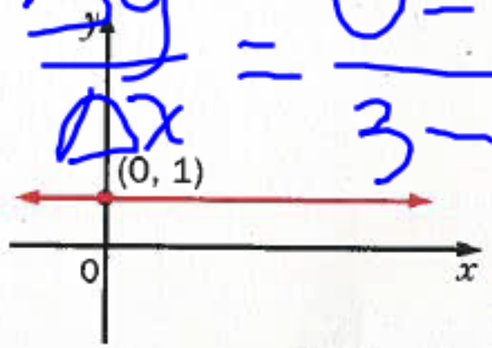
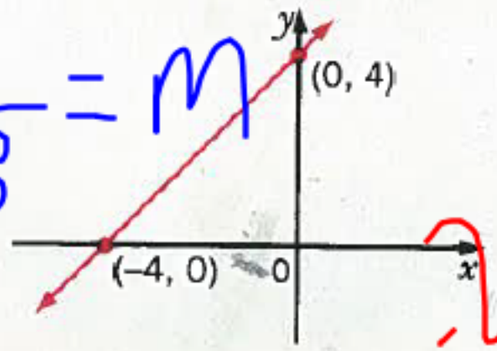


$\frac{\Delta y}{\Delta x} = \frac{0-2}{3-0} = \frac{-2}{3}$

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

$b = 2$

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



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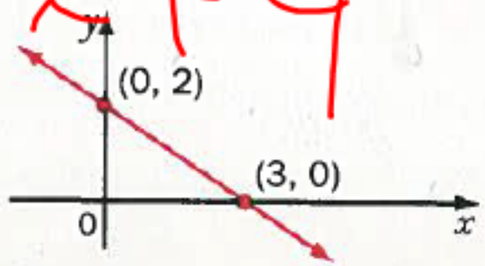

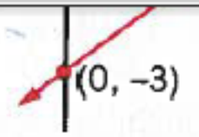

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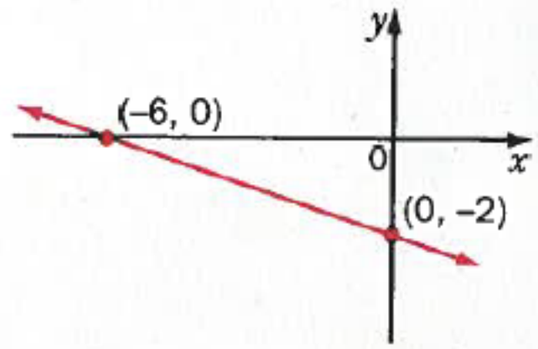

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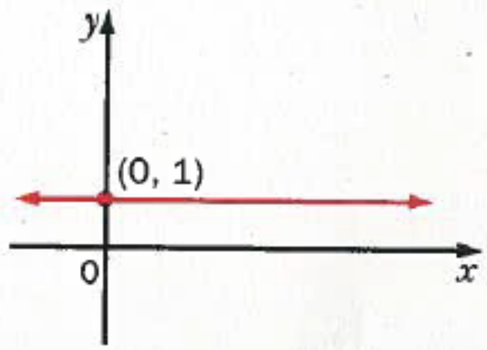

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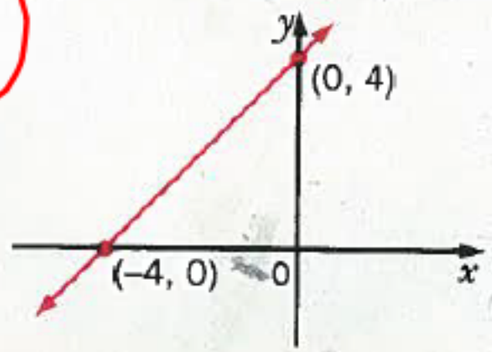

Methods of Graphing

-> Table of Values
-> Point Slope
-> y=mx+b
-> Find the x-intercept and y-intercept

Types of Equations

-> Point-Slope (point (1,2) -- (y-2)=m(x-1)
-> Slope y-Intercept (y=mx+b)
-> Standard (ax+by+c=0)

HOMEWORK

→ Skip last 6 questions on review package

→ Box 5