2.2 H.W. ?'s

16, 24, 18, 20, 25, 22, 32, 43, 19.

(16) $15 = \frac{a}{3} - 2$

$+2 \qquad +2$

$3 \cdot 17 = \frac{a}{\cancel{3}} \cdot \frac{\cancel{3}}{1}$

$51 = a$

$\frac{17}{51}$

18. $.6g + 11 = 5$

$\quad -11 \quad -11$

$\frac{.6g}{.6} = \frac{-6}{.6}$

$g = -10$

$$\begin{array}{r} 10. \\ .6\overline{)6.0} \end{array}$$

22 $\frac{z}{2} + 1 = \frac{3}{2}$

$\quad -1 \quad -1$

$2 \cdot \frac{z}{2} = \frac{1}{2} \cdot \frac{2}{1}$

$z = 1$

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

19.

$$32 = 5 - 3t$$
$$-5 \qquad -5$$
$$\frac{27}{-3} = \frac{-3t}{-3}$$
$$-9 = t$$

20.

$$2d + \frac{1}{5} = \frac{3}{5}$$

$$-\frac{1}{5} \quad -\frac{1}{5}$$

$$\frac{2 \cdot d}{2} = \frac{2}{5} \div \frac{2}{1}$$

$$d = \frac{2}{5} \cdot \frac{1}{2}$$

$$\cancel{5 \cdot 1 \cdot 2}$$

$$d = \frac{1}{5}$$

24

$$\frac{3}{4} = \frac{3}{8}x - \frac{3}{2}$$

$$+\frac{3}{2}\frac{6}{4} \qquad\qquad +\frac{3}{2}$$

$$\frac{28}{3_1} \cdot \frac{13}{4_1} = \frac{3}{8} \times \frac{8}{3}$$

$$6 = x$$

25

$$\frac{1}{5} - \frac{x}{5} = \frac{-2}{5}$$

$$-\frac{x}{5} + \frac{1}{5} = \frac{-2}{5}$$

$$-\frac{1}{5} \qquad -\frac{1}{5}$$

$$5 \cdot -\frac{x}{5} = \frac{-3}{\cancel{5}} \cdot \frac{\cancel{5}}{1}$$

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

$$x = 3$$

32

$$6 + 2x = -8$$
$$-6 \qquad\qquad -6$$
$$\frac{2x}{2} = \frac{-14}{2}$$
$$x = -7$$

43

$$\frac{3}{4} + \frac{x}{2} = 3$$
$$\frac{x}{2} + \frac{3}{4} = \frac{3^{\times 4}}{1_{\times 4}} \quad \frac{12}{4}$$
$$-\frac{3}{4} \qquad -\frac{3}{4}$$
$$\frac{\cancel{2}^{1}}{1} \cdot \frac{x}{\cancel{2}_{1}} = \frac{9}{\cancel{4}_{2}} \cdot \frac{\cancel{2}^{1}}{1}$$
$$x = \frac{9}{2}$$

Problems to <u>KNOW</u>

for Review Test.

Evaluate the expression

$a=2 \quad b=4 \quad c=-8$

1. $a-2b \qquad 2-2(4) = 2-8 = -6$
2. $7(c-b) = 7(-8-4) = 7(-12) = -84$
3. $(c+a)\div 5 = (-8+2)\div 5 = -6\div 5 = \frac{-6}{5}$
4. $a(b+c)^2 = 2(4+{}^-8)^2 = 2(-4)^2 = 2\cdot 16 = 32$
5. $35-(-2a) = 35-(-2(2)) = 35+(4) = 39$

Evaluate the expression

6. $\frac{7}{8} - \frac{4}{8} = \frac{3}{8}$

7. $-\frac{9}{12} + \frac{\cancel{5}^{10}}{\cancel{6}_{12}} = \frac{1}{12}$

8. $2.75 - .2 =$

$$\begin{array}{r} 2.75 \\ -\ .2 \\ \hline 2.55 \end{array}$$

Write the fraction as a <u>decimal</u> & a <u>percent</u>.

(9) $\frac{1}{5} = 5\overline{)1.0}$ = .2 .20 20%

(10) $\frac{3}{4} = 4\overline{)3.00}$ = .75 75%

(11) $\frac{7}{50} = 50\overline{)7.00}$ = .14 14%

Find the % of the #.

12. 65% of 12

$$\begin{array}{r} {}^{1}12 \\ \times\ .65 \\ \hline 60 \\ 720 \\ \hline 7.80 \end{array}$$

13. 40% of 30

$$\begin{array}{r} 30 \\ \times\ .4 \\ \hline 12.0 \end{array}$$

14. 95% of 155

147.25

$$\begin{array}{r} {}^{2}155 \\ .95 \\ \hline 775 \\ 1395\ 0 \\ \hline 147.25 \end{array}$$

Simplify.

15. $-6g + 9g - 4 = 3g - 4$

16. $x^3 \cdot x^{11} = x^{14}$

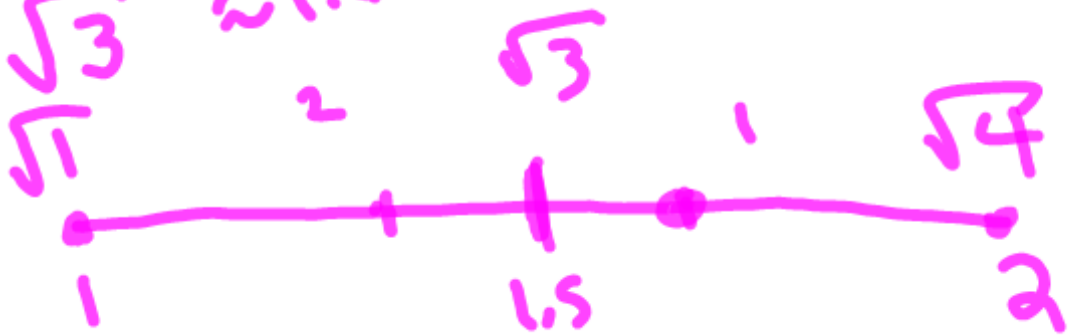
17. $\frac{v^{12}}{v^6} = v^6$

18. $c^{-5} \cdot c^8 = c^3$

Approximate the square root to the nearest tenth

19. $\sqrt{10} \approx 3.1$ or 3.2

20. $\sqrt{3} \approx 1.6$ or 1.7

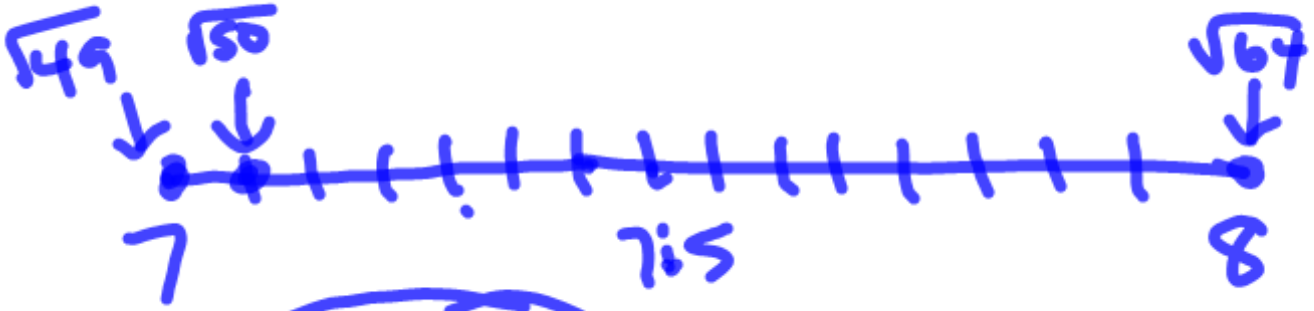


21

$\sqrt{50}$

$\sqrt{49}$, $\sqrt{50}$, $\sqrt{64}$

1 14



7.1 or 7.2

Solve the equation

26. $\frac{\cancel{6}}{1} \cdot \frac{r}{\cancel{6}} = 8 \cdot 6$

$r = 48$

27. $x + 4x = 35$

$\frac{5x}{5} = \frac{35}{5}$

$x = 7$

(28)

$$\frac{+\cancel{6}^{1}a}{+\cancel{6}^{1}} = \frac{288}{-6}$$

$$a = -48$$

$$\begin{array}{r} 48 \\ 6\overline{)288} \\ \underline{24} \\ 48 \end{array}$$

(29)

$$\frac{\cancel{5}}{\cancel{3}} \cdot \frac{\cancel{3}^{1}}{\cancel{5}} m = \frac{\cancel{18}^{6}}{1} \cdot \frac{5}{\cancel{3}_{1}}$$

$$m = 30$$

30

$$17 = 4h - 7$$
$$+7 \qquad\qquad +7$$
$$\frac{24}{4} = \frac{4h}{4}$$
$$6 = h$$

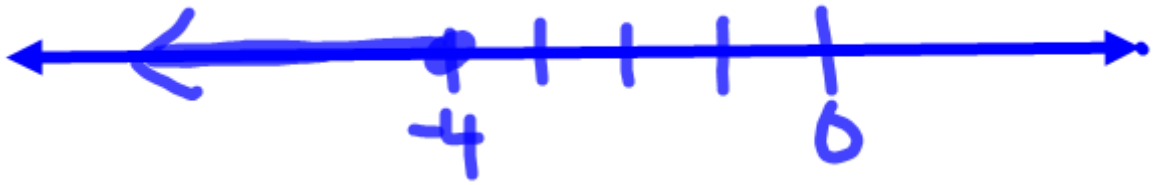
31

$$x - 13 < 2$$
$$+13 \qquad +13$$
$$x < 15$$

32

$$\frac{-4 \cdot p}{-4} \geq \frac{16}{-4}$$

$$p \leq -4$$



Rewrite in slope-int form.
Then identify the slope & y int of the line.

33. $-6x + 2y = 12$

$+6x \qquad +6x$

$\frac{2y}{2} = \frac{6x+12}{2}$

$y = 3x + 6$

Slope-Int form

$y = mx + b$

$m =$ slope

$b =$ y-int

$m = 3$

$b = 6$

Find the slope

34. $(\overset{x_1}{2}, \overset{y_1}{5})\ (\overset{x_2}{4}, \overset{y_2}{1})$

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{1-5}{4-2} = \frac{-4}{2}$$

$$= -2$$

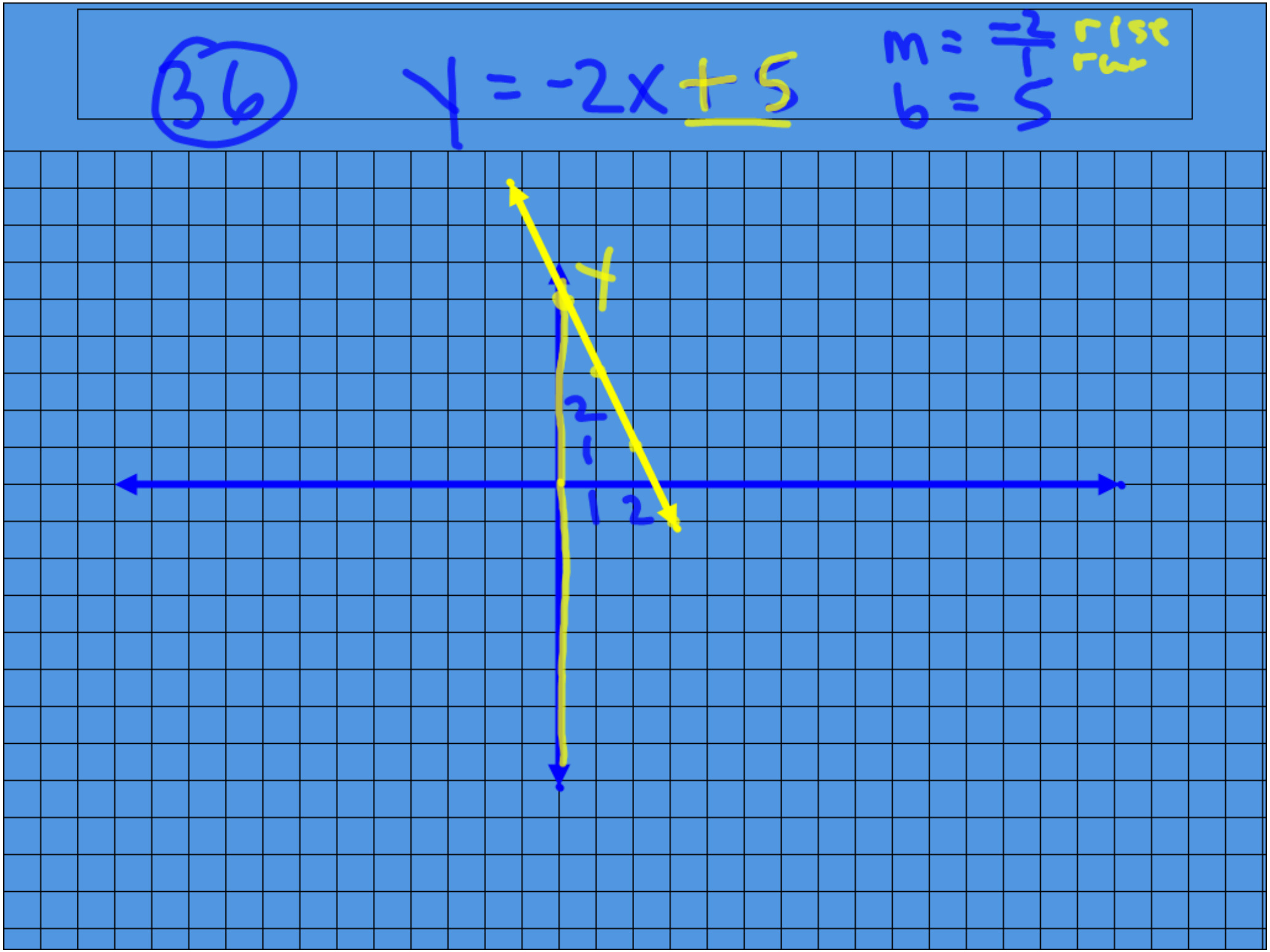
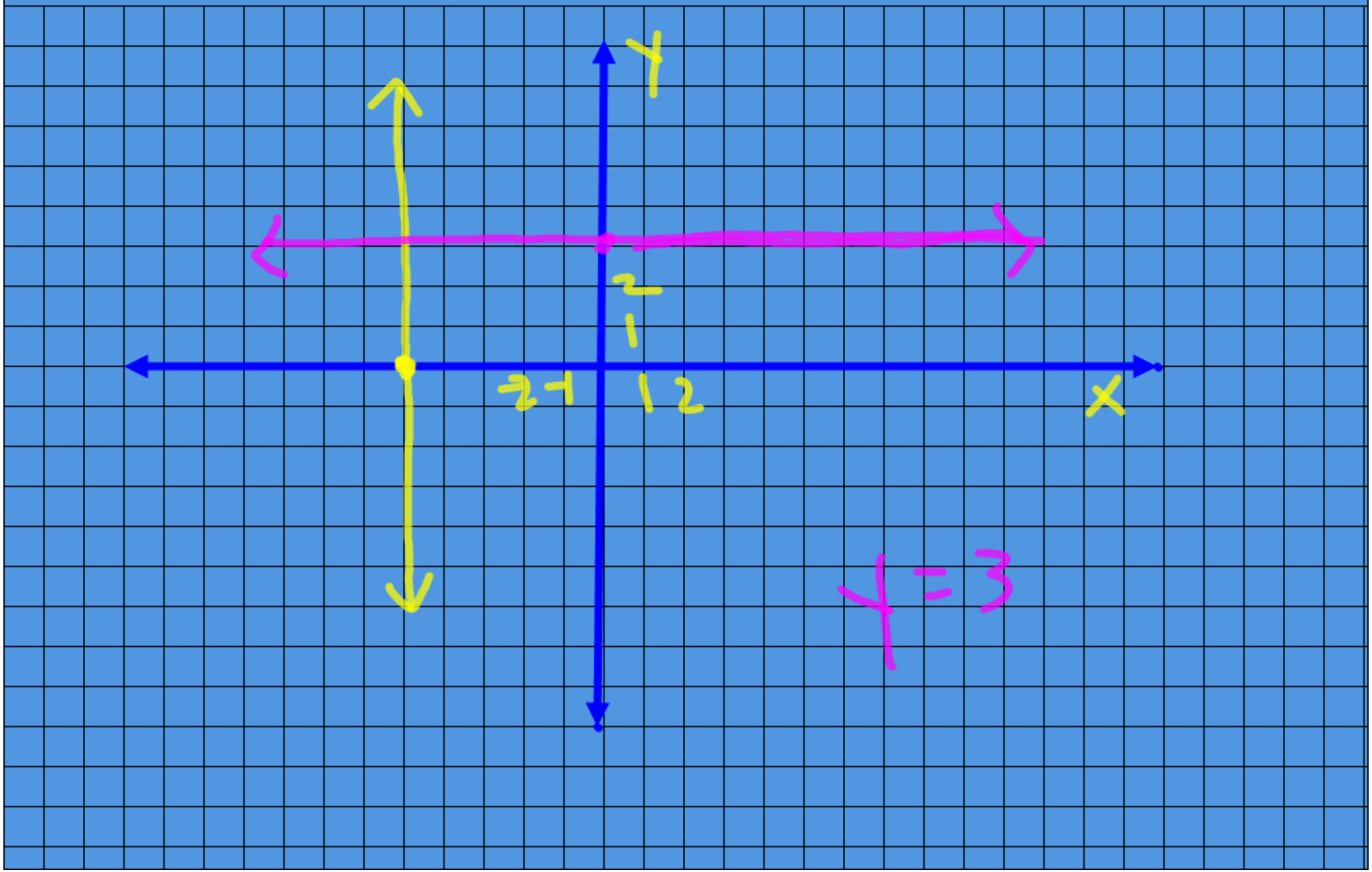
35. $(\overset{x_1}{-1}, \overset{y_1}{3})\ (\overset{x_2}{2}, \overset{y_2}{-8})$

$$m = \frac{-8-3}{2+1} = \frac{-11}{3}$$

36 $y = -2x + 5$

$m = \frac{-2}{1}$ rise / run

$b = 5$



37 $x = -5$