

$$\begin{aligned}(2x^{-3}y^5)^{-11} &= \left(\frac{2y^5}{x^3}\right)^{-11} = \frac{2^{-11}y^{-55}}{x^{-33}} \\ &= \frac{x^{33}}{2^{11}y^{55}}\end{aligned}$$

$2^{-5} \neq \frac{1}{-32}$ A bunch of
these kinds
of mistakes

$$\begin{aligned} -3(x - y + 2z = 3) & \text{ E1} \\ 4x + y - z = 8 & \text{ E2} \\ 3x - y + z = 6 & \text{ E3} \end{aligned}$$

2nd System

$$\begin{aligned} x - y + 2z &= 3 \\ -2(5y - 9z = -4) \\ 5(2y - 5z = -3) \end{aligned}$$

3rd System

$$x - y + 2z = 3$$

$$5y - 9z = -4$$

$$z = 1$$

$$5y - 9(1) = -4$$

$$5y - 9 = -4$$

$$5y = 5$$

$$y = 1$$

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

$$x - 1 + 2 = 3$$

$$x + 1 = 3$$

$$x = 2$$

$$\begin{array}{r} -4\text{E1} \quad -4x + 4y - 8z = -12 \\ \text{E2} \quad 4x + y - z = 8 \\ \hline -4\text{E1} + \text{E2} \quad 5y - 9z = -4 \end{array}$$

$$\begin{array}{r} -3\text{E1} \quad -3x + 3y - 6z = -9 \\ \text{E3} \quad 3x - y + z = 6 \\ \hline \end{array}$$

$$2y - 5z = -3$$

$$-2\text{E2} \quad -10y + 18z = 8$$

$$5\text{E3} \quad 10y - 25z = -15$$

$$-7z = -7$$

$$z = 1$$

Recall

$$|2x+b| < c$$

$$|2x+b| > c$$

WORD PROBS: Like that 1st Homework Assignment.

Monday: Mixture problem (2x2)

Amt Pure	$.2x + .3y = .25(10)$	Set up	Variables
Total Amt	$x + y = 10$		Equation(s)

Wednesday

	20%	30%	Mix
Pure	$.2x$	$.3y$	$.25(10)$
Total	x	y	10

Suppose you KNOW it's 10 liters of 20% soln? and all you know is the final mix is 25%?

	20%	30%	Mix
Pure	$.2(10) +$	$.3y =$	$.25(10+y)$ IS ready to solve.
Total	$10 +$	$y =$	$10+y$

Graphs :

$$y = mx + b$$

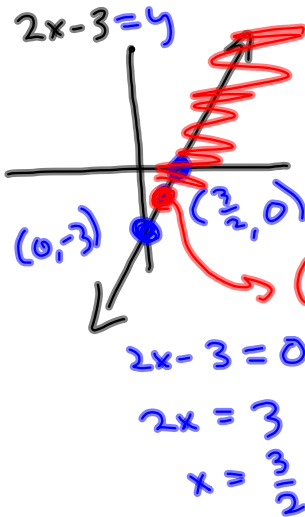
$$Ax + By = C$$

$$\sqrt{x}$$

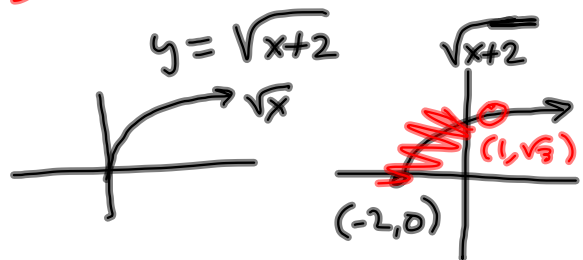
$$x^2$$

piecewise combo of 2.

$$f(x) = \begin{cases} 2x - 3 & \text{if } x \leq 1 \\ \sqrt{x+2} & \text{if } x > 1 \end{cases} \quad x=1 \text{ is suture point.}$$



$$\begin{aligned} x &\leq 1 \quad \bullet \\ 2(1) - 3 & \\ &= 2 - 3 \\ &= -1 \end{aligned}$$



$$\begin{aligned} \text{suture: } x &= 1 \quad \circ \\ \sqrt{1+2} &= \sqrt{3} \\ (1, \sqrt{3}) & \end{aligned}$$

