nome: Bruno da Cruz Pereira Turma: B

Questão 1º

$$\begin{cases} 3x - 2y = -14 \\ 2x + 3y = 8 \end{cases}$$

$x = \frac{-14 + 2y}{3}$ $\quad \frac{-28 - 13y}{3} = 8$

$2x + 3y = 8$ $\quad x = \frac{-14}{3} + \frac{24}{3}$

$y = 4$ $\quad x = \frac{-14}{3} + \frac{24}{3}$

$x = -2$

$y = 4$

b-

$$\begin{cases} 2x + y + z = 3 \\ -2x + 2y - z = 0 \\ 3x + y + z = 1 \end{cases} \qquad \begin{cases} x = -2 \\ y = 1 \\ z = 6 \end{cases}$$

b-

$$\begin{cases} 2x + x + x = 3 \\ -2x + 2x - x = 0 \\ 3x + x + x = 1 \end{cases}$$

$$\Delta = \begin{vmatrix} 2 & 1 & 1 \\ -2 & 2 & -1 \\ 3 & 1 & 1 \end{vmatrix} = -3 \qquad \Delta_1 = \begin{vmatrix} 3 & 1 & 1 \\ 0 & 2 & -1 \\ 1 & 1 & 1 \end{vmatrix} = 6$$

$$A_2 = \begin{vmatrix} 2 & 3 & 1 \\ -2 & 0 & -1 \\ 3 & 1 & 1 \end{vmatrix} = -3 \qquad A_3 = \begin{vmatrix} 2 & 1 & 3 \\ -2 & 2 & 0 \\ 3 & 1 & 1 \end{vmatrix} = -18$$

$x_1 = -2$

$x_2 = 1$

$x_3 = 6$

c- a- $1 - 2(x-1) < 2$

$1 - 2x + 2 < 2$

$-2x < 2 - 2 - 1$

$-2x < 2 - 3$

$-2x < -1$

$x > 1/2$

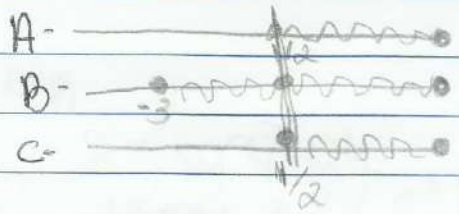
b- $2 - 3x \geq x + 14$

$-3x - x \geq 14 - 2$

$-4x \geq 12$

$x \geq -\frac{12}{4}$

$x \geq -3$



Questão 2º

y = Lápis

x = Estojo

$x = 3y - 5$

$2y + (3y - 5) = 10$

$2y + 3y - 5 = 10$

$5y = 10 + 5$

$y = \frac{15}{5}$

$y = 3$ Cada lápis

Questão 3

$\begin{cases} 5x + 2y + 3z = 6,5 \\ 3x + 3y + 3z \\ 2x + 5y + 2z \end{cases}$

- $x + y + z = 3,5$
- $x = 3,5 - y - z$
- $3,5 - y - z + 2y + 3z = 6,5$
- $3,5 + y + 2z = 6,5$

$y = 6,5 - 3,5 - 2x$

$y = 3 - 2x$

Continua outro folho

• $2(3,5-y-z)+5(3-2z)+2z=13$

$7-2y-2z+15-10z+2z=13$

$22-2y-10z=13$

$-2y-10z=13-22 \div(1)$

$2y-10z=-9 \div(2)$

$y+5z=4,5$

• $y+5z=4,5$

$3-2z+5z=4,5$

$3+3z=4,5$

$3z=4,5-3$

$3z=1,5$

$z=\frac{1,5}{3}=0,6$

$y=3.2z$

$y=3.2.(0,5)$

$y=3-1$

$y=2$

$x=3,5-2-0,5$

$x=3,5-2,5$

$x=1$

$x=1 ; y=2 ; z=0,5$

Total: $7x=7.1=7$

$7y=7.2=14$ = 24,5 reais

$7z=7.0,5=3,5$

Questão 4ºa

$$8^{6x-10} = \frac{1}{2^{3x}}$$

$$8^{6x-10} = \frac{1}{2^{3x}}, \quad x \in \mathbb{R}$$

$$2^{18x-30} = \frac{1}{2^{3x}}$$

$$2^{18x-30} = 2^{-3x} \rightarrow 18x - 30 = 30$$

$$18x - 30 = -3x \qquad 21x = 30$$

$$x = \frac{10}{7}$$

4B

$$\log_5 0{,}04 \qquad 125 = x$$

$$\log_5 -2(5^3) = x$$

$$\frac{-3}{2} = x \qquad \frac{1}{} \quad x = -1\frac{1}{2} \; / x = 1{,}5$$

$$/ \quad x = 1{,}5$$