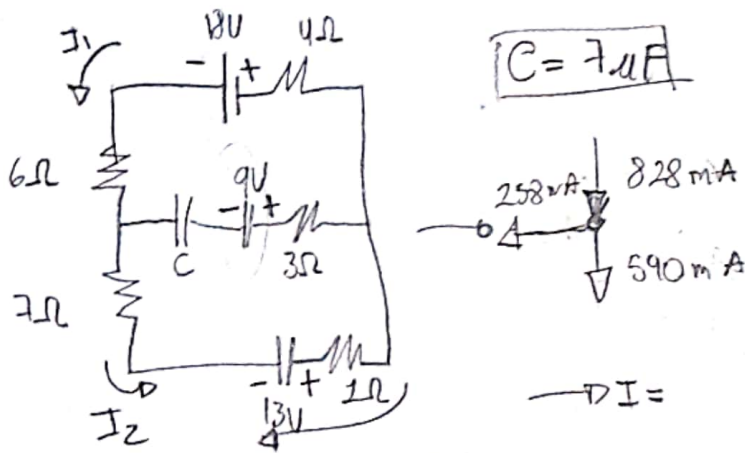


4762

Registro académico: 202200029	CUI 310022770701
NOMBRE: Franklin Olando Del Villar	Firma:
CATEDRATICO: Claudia Contreras	Sección C



$$C = 7 \mu F$$

Por proceso de Carga.

$$I(t) = I_0 e^{-t/\tau}$$

$\tau = 0$

$$I = \frac{U}{R}$$

$$I(t) = I_0 e^{-t/\tau}$$

En  $t=0$  ¿Comate  $I =$  en mA?  
Sumistra la fem de 13V

Mayas

$$I_1(6+3+4) + 9 - 18 = 0$$

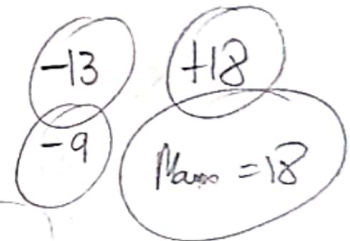
$$I_1(13) - 9 + 3I_2 = 0$$

$$I_1(3) - I_2(11) + 13 - 9 = 0$$

$$I_1(3) - I_2(11) - 4 = 0$$

$$I_1 = -0.82835 = 828 \text{ mA}$$

$$I_2 = -0.58955 = 590 \text{ mA}$$



Carga Max =

$$Q(t) = CE \left[ 1 - e^{-t/\tau} \right]$$

$$Q(\infty) = CE \left[ 1 - \frac{1}{e^0} \right]$$

$$Q(\infty) = CE \Rightarrow 18(7 \mu C) =$$

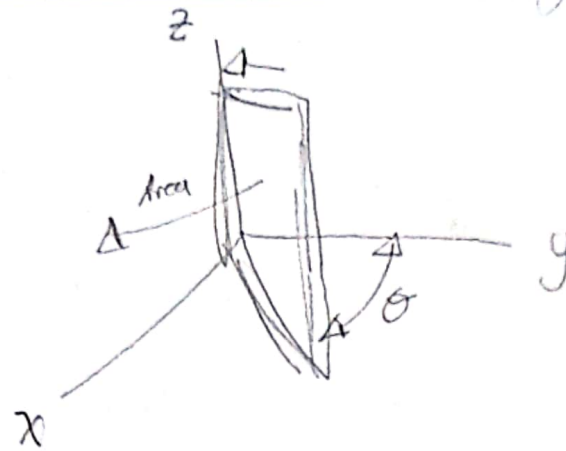
$$I = 238 \text{ mA}$$

$$I = \frac{V}{R}$$

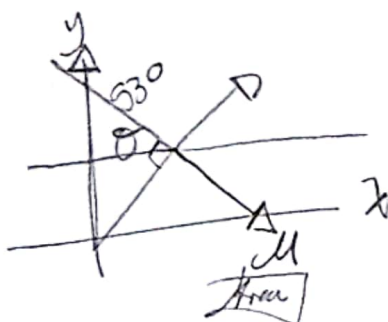
$$126 \text{ mC}$$

Registro académico: 2022020829	CUI: 3110222770701
NOMBRE: Arantza Olvera Rios Perez	Firma: [Signature]
CATEDRATICO: Claudia Contreras	Sección: C

$N = 50$   
 $a = 0.12 \text{ m}$   
 $b = 0.09 \text{ m}$   
 $I = 1.75 \text{ A}$



Verbo en  $xy$



$$|\vec{A} = NIA| = A \text{ m}^2$$

$$\vec{A} = (50)(1.75)(0.12)(0.09) \sin \theta$$

$$\vec{A} = 0.945$$

$$90 + \theta = 90 + 53 = 143$$

$$\vec{A} = (50)(1.75)(0.12)(0.09) \sin(143) =$$

$$\vec{A} = 0.568715 \text{ Am}^2$$

$$\tau = \vec{A} B \sin \theta$$

$$0.568715 (3.70) \sin(90 + 53) = 2.1042$$

Registro académico: 202200089	CUI 3110023770701
NOMBRE: Franklin Orlando May Pérez	Firma:
CATEDRATICO: Claudia Contreras	Sección C

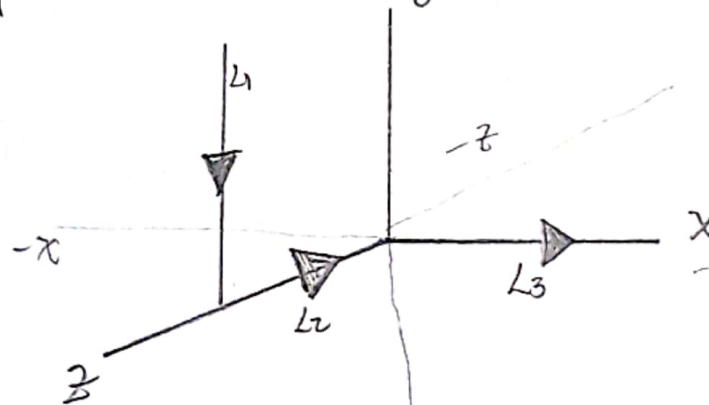
$$L_1 = 5.50 \text{ m}$$

$$I = 3.00 \text{ A}$$

$$B = (6.50 \hat{i}) + (0 \hat{j}) - (4.80 \text{ k}) \text{ mT}$$

$$L_2 = 1.25 \text{ m}$$

$$L_3 = 3.50 \text{ m}$$



Construye el Campo

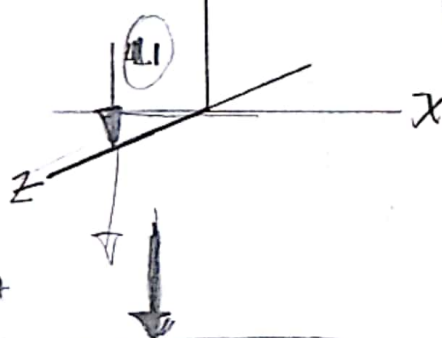
Fuerza

Suma	$\hat{i}$	$\hat{j}$	$\hat{k}$
$\hat{i}$	107.25		-79.2
	+ 24.375		-18
	68.25		-50.4
	199.875		-147.6

$F_1$  sobre  $L_1$

$$F_n = I L_n B \sin(\theta)$$

$L_1$



$$F_1 = (3)(5.50)(6.50 \hat{i} - 4.80 \hat{k}) = 107.25 \hat{i} - 79.2 \hat{k}$$

$$D = 248.46$$

$$\sqrt{199.875^2 + (-147.6)^2} =$$

$$\sqrt{107.25^2 + (-79.2)^2}$$

$$= 133.0$$

$$F_2 = (3)(1.25)(6.50 \text{ mT } \hat{i}) = 24.375 \hat{i}$$

$$-4.80 \text{ mT } \hat{k} = -18$$

$$\sqrt{(24.375)^2 + (18)^2} =$$

$$= 30 \text{ mN}$$

$$= 30.3$$

$$L_3 = (3)(3.50)(6.50 \hat{i} - 4.80 \hat{k}) = 68.25 \hat{i} - 50.4 \hat{k}$$

$$\sqrt{mag} = 84.84$$

Suma  $\hat{i}$  y  $\hat{k}$



Registro académico: 202200084	CUI 3110028770701
NOMBRE: Franklin Orlando Nájera Perot	Firma: <i>[Signature]</i>
CATEDRÁTICO: Claudia Contreras	Sección: C

Electron =

Electron	$E_0 C = 58.0 \text{ KeV}$	$B = 0.487 \text{ V}$
----------	----------------------------	-----------------------

*detener el Tallas*

Razon en mm? frecuencia MHz?

$K = 58 \text{ KeV}$   ~~$K eV = 1$~~

$eV = 1.60 \times 10^{-19} \text{ J}$

$k = 58,000 \text{ eV}$

$K = 9.28 \times 10^{-15} \text{ J}$

$K = \frac{1}{2} m v^2$

$R = \frac{m v}{q B}$

$v = \sqrt{\frac{K(2)}{m}}$

$v = \sqrt{\frac{9.28 \times 10^{-15} (2)}{9.1094 \times 10^{-31}}} = 142739476$

$R = \frac{9.1094 \times 10^{-31} (142739476)}{1.6077 \times 10^{-19} (0.487)}$

$T = \frac{2\pi R}{v}$

$f = \frac{1}{T}$

$T = \frac{2\pi (1.67 \times 10^{-3})}{142739476}$

$\lambda = 1.666 \times 10^{-3} \text{ m} = 1.67 \text{ mm}$

$T = 7.351098 \times 10^{-11}$

$f = 1.36 \times 10^{10} = 13603 \times 10^6$

Registro académico: 202200089	CUI 3100022770701
NOMBRE: Franklin Orlando Ng Perez	Firma: <i>[Signature]</i>
CATEDRATICO: Claudi Contreras	Sección C

$N=20$  sobre 7

$$A = 600 \text{ cm}^2 \cdot \frac{(\text{m})^2}{(100 \text{ cm})^2} = 0.06 \text{ m}^2$$

Campo =  $B_x = 0.45 \text{ T}$

$B_y = 0.00 \text{ T}$

$B_z = 0.00 \text{ T}$

Gira con frecuencia =  $340 \text{ rpm} \cdot \frac{2\pi \text{ rad}}{1 \text{ rev}} \cdot \frac{60 \text{ seg}}{1 \text{ min}} = 40800 \text{ rad/s} = f$

E

$$T = 7.8125 \times 10^{-6} \text{ seg}$$

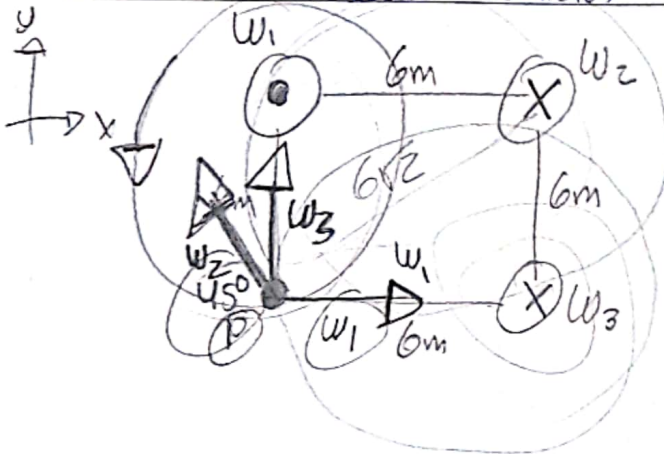
END

$$E_{\text{ind}} = -N A \cos \theta$$

$$(-20)(0.06) \cos 0 = -1.2 (0.45) = -0.54$$

$$(-20)(0.06) \cos 0 (0.60) = -0.72$$

Registro académico: 202202089	CUI 340022790701
NOMBRE: Fantin Orlando No. Perez	Firma:
CATEDRATICO: Claudia Contreras	Sección: c



$$I = 80 \text{ A} \quad (B)$$

$$\mu_0 = 4\pi \times 10^{-7}$$

$$B = \frac{\mu_0 \cdot I_n}{2\pi r_n}$$

$$B_1 = \frac{4\pi \times 10^{-7} (80)}{6} x = 16.755 \times 10^{-6} \text{ en } x$$

$$B_3 = \frac{4\pi \times 10^{-7} (80)}{6} y = 16.755 \times 10^{-6} \text{ en } y$$

$$B_2 = \frac{4\pi \times 10^{-7} (80)}{6\sqrt{2}} \begin{matrix} \sin 45^\circ & 8.3775 \times 10^{-6} x \\ \cos 45^\circ & 8.3775 \times 10^{-6} y \end{matrix}$$

$$M_{aydw} = \sqrt{(8.38 \times 10^{-6})^2 + (25.1325)^2}$$

$$= 26.4927 \times 10^{-6} = 26.5$$

Registro académico: 2022000894	CUI 310002922001
NOMBRE: Francisco Orlando Del Poz	Firma: [Signature]
CATEDRATICO: Claudia Contreras	Sección: C

Fuerza sobre  $W_2$

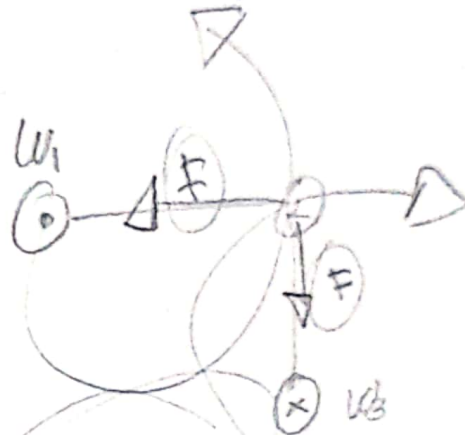
$$F = \frac{\mu_0 I_1 I_2}{2\pi r_{12}}$$

$$F_{12} = \frac{4\pi \times 10^{-7} (80)^2}{2\pi (6)} D = 2.13 \times 10^{-4}$$

$$213.33 \times 10^{-6} = 301.69 \mu T$$

302

301.69  $\mu N/m$





Registro académico: 202200089	CUI 311002270701
NOMBRE: Franklin Orlando Ap. Pérez	Firma: <i>[Signature]</i>
CATEDRATICO: Claudia Contreras	Sección: "C"

$$N=220 \quad \rho (50) (55) + (2K)$$

$$N=220 \quad \rho (50^2) + (50) + (2K) \quad \text{7 segundos}$$

$$r=a=0.10m$$

$$b=0.15m$$

$$T=4 \text{ seg}$$

$$B = \frac{\mu_0 N \cdot I}{L}$$

$$B = \mu_0 n I$$

$$T=4 \text{ se}$$

$$4 \times 10^{-7} (220) (80 \times 10^6) = 0.022116$$

$$20 = 5.5292 \times 10^{-2}$$

$$2 = 5.5292 \times 10^{-4}$$

$$\mu_{\text{avg}} = 0.0222$$

$$22.8 \times 10^{-3}$$

Induced.

$$E = -N A \cos \theta \frac{\Delta B}{\Delta t} \quad T=4$$

$$-220 (0.189) \cos(60) \left( \frac{18 \times 10^{-3}}{4} \right)$$