

Informática 2

Atividade Avaliativa 3

Semana 26

Disciplina: Física

Professor: Gabriel

Nome: Felipe Augusto do Nascimento

Objetivo: Fazer e desenhar as 4 questões postadas
no Moodle

Contagem

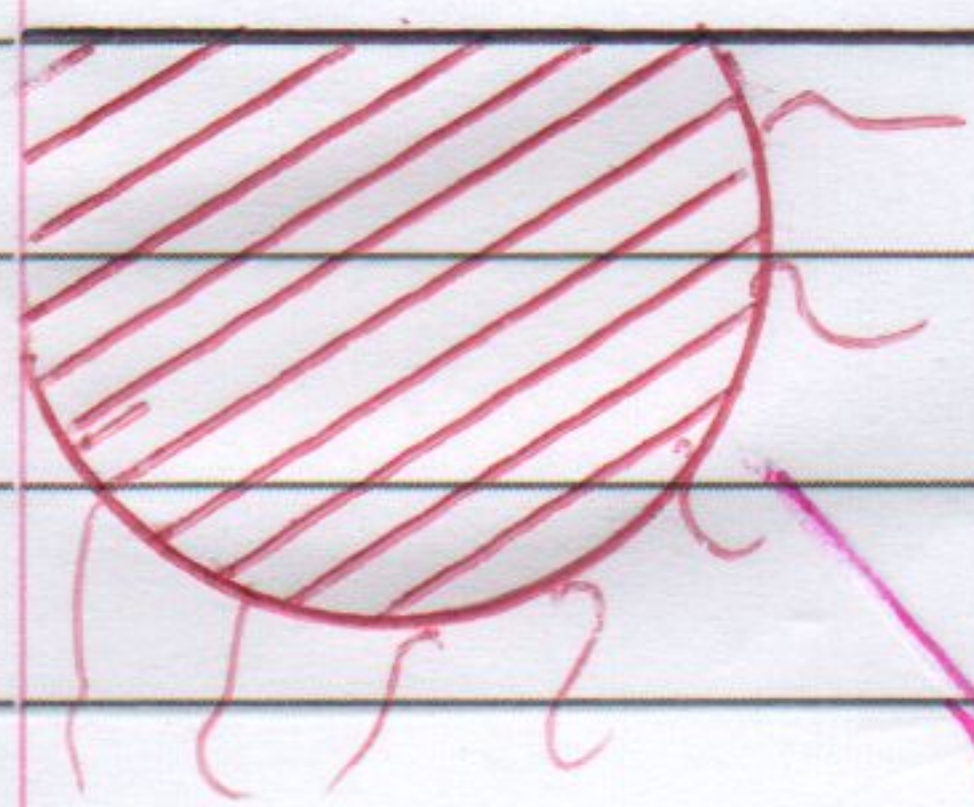
Dezembro/ 2021

$$F = 20 \text{ KHz} = 20000 \text{ Hz}$$

$$V = 3495 \text{ m/s}$$

$$\lambda = \frac{V}{F} \rightarrow \lambda = \frac{3495}{20000} = \lambda = 0,17475 \dots \lambda = 17,475$$

$$\lambda = 17,475 \text{ cm}$$



Meio 1

Meio 2

$$n \approx 0,99$$

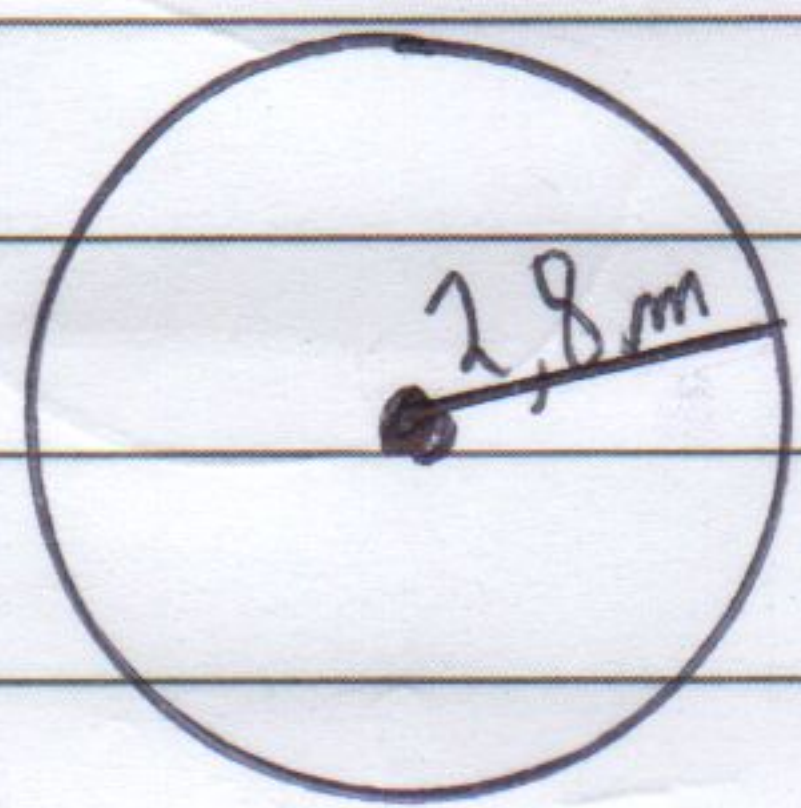
$$0,91 = \frac{250703761}{0,37} \cdot x_2$$

$$0,37 \quad x_2$$

$$0,91 x_2 = 275.498.638,4615385$$

$$x_2 = 302.745.756,5511412$$

$$n = \frac{3 \cdot 10^8}{V_2}$$



$$R = 2,8 \text{ m}$$

$$V = 12,7 \text{ m/s}$$

Circunferência

$$C = 2\pi R$$

$$C = 2 \cdot 3,14 \cdot 2,8$$

$$C = 17,584 \text{ m}$$

$$\pi = 3,14$$

Tempo 1 volta:

$$T = \frac{17,584}{12,7}$$

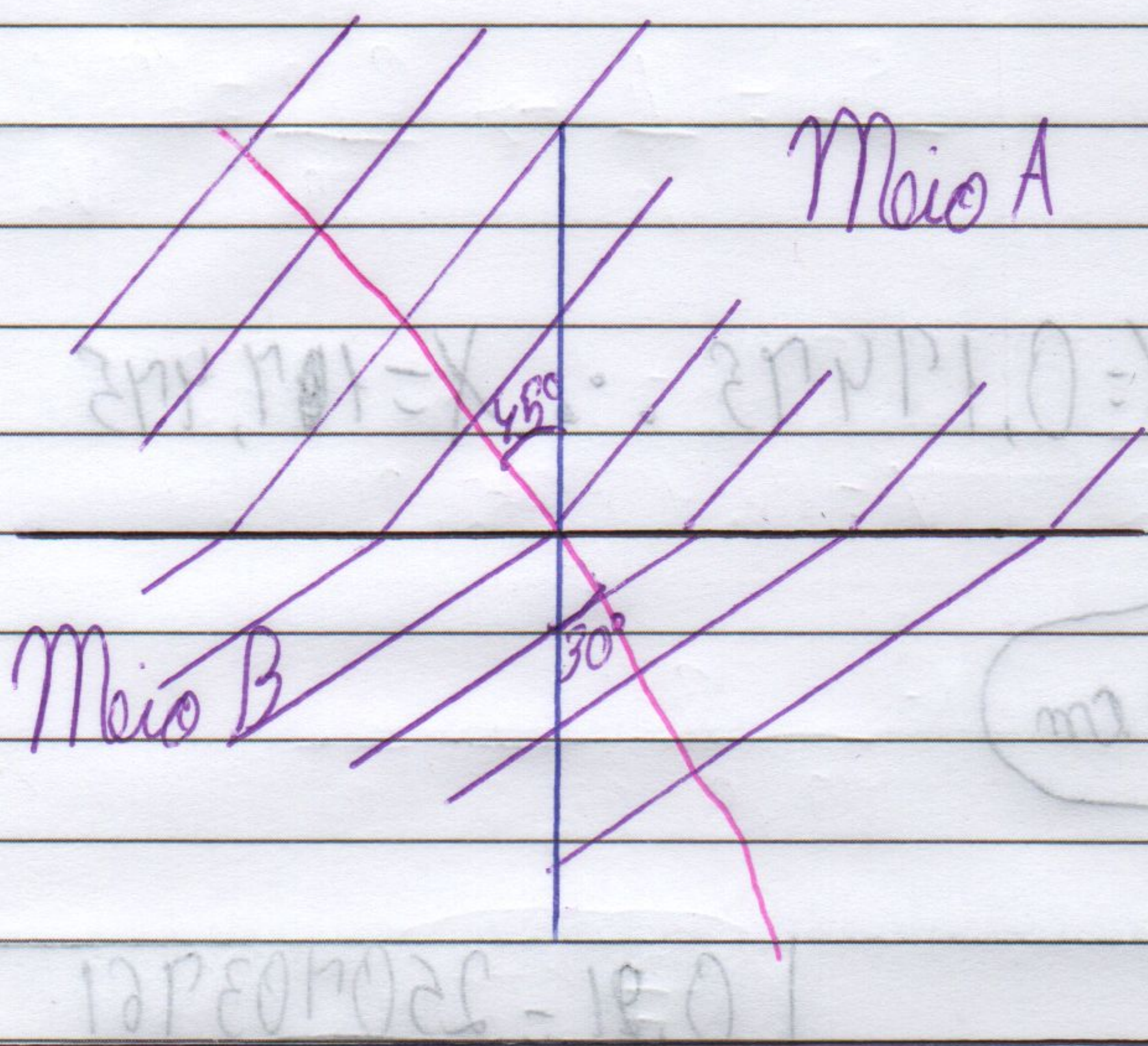
$$T = 1,38 \text{ s}$$

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Frequência

$$F = \frac{1}{1,38} \quad F = 0,72$$

$$F = 0,72 \text{ Hz}$$

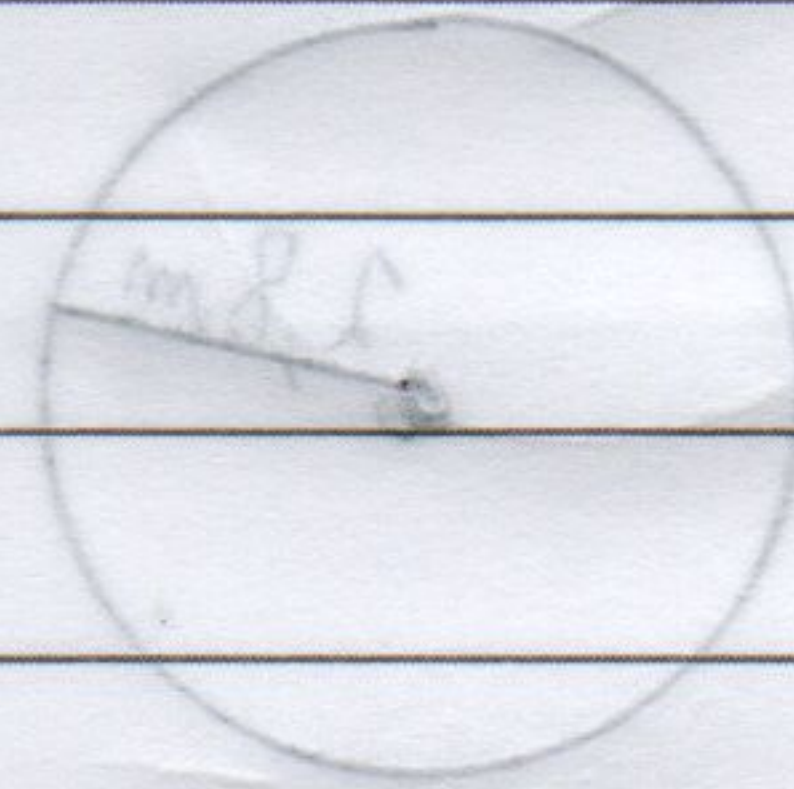
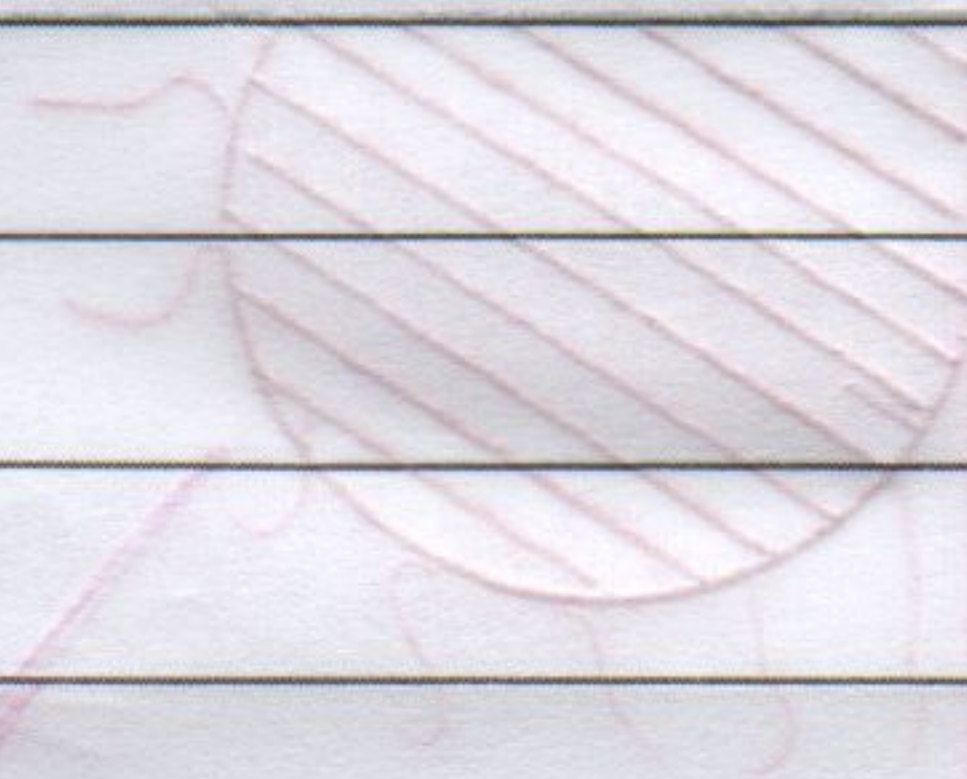


$$\frac{0,70}{0,50} = \frac{C_1}{C_2}$$

$$\frac{0,70}{0,50} = \frac{3,8}{C_2}$$

$$0,70 C_2 = 1,9$$

$$C_2 = 2,71$$



$$\begin{aligned} 17,284 &= 1 \\ 17,284 &= 1 \\ 17,284 &= 1 \end{aligned}$$

$$V = 3,44$$

$$\begin{aligned} C &= 2\pi R \\ C &= 2 \cdot 3,14 \cdot 2,8 \\ C &= 17,284 \text{ m} \end{aligned}$$

$$F = 0,15 \text{ kg}$$

$$F = 0,15$$