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Nombre del trabajo: “El fin”

PASIÓN POR EDUCAR

Materia: Biomatemáticas

Grado: 2

Grupo: A

Metronidazol

Dosis oral 500mg

[C] plasmática max = 8 a 13 mg/L
en un tiempo max 0.25 a 4.0 hr

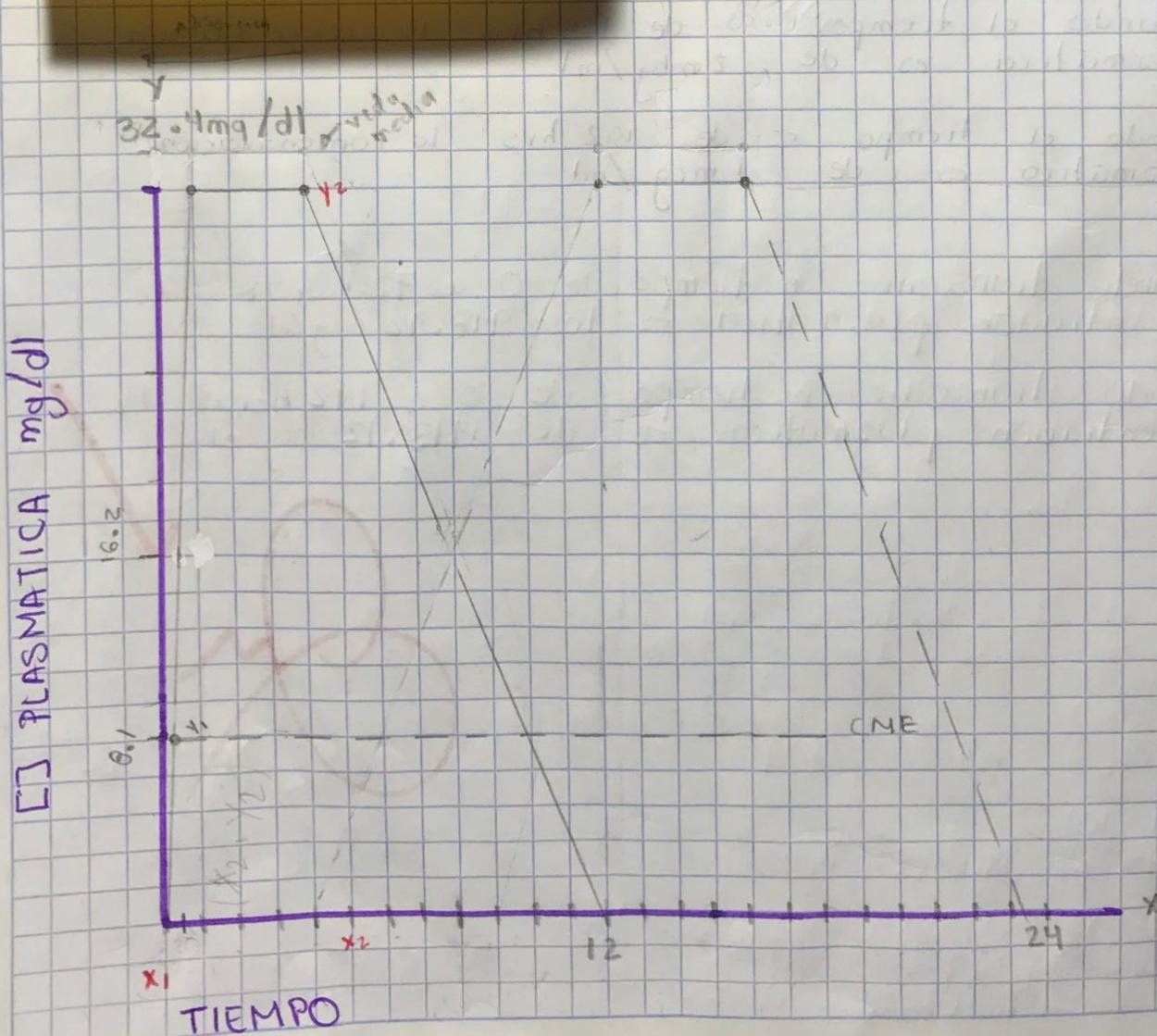
Biodisponibilidad por vía oral: $\pm 90\%$

[C] plasmática % = 450mg

500mg \rightarrow 100%
150mg \rightarrow 90%

8mg \rightarrow 100
17.2% \rightarrow 90

32.4 mg/L [C] plasmática



$$P_1(x_1, y_1)$$

$$P_2(x_2, y_2)$$

$$P_1(.30, 8.1) = \frac{32.4 - 8.1}{4 - .30} = \frac{24.3}{3.7} = 6.56$$

$$\bullet y = m(x) - x_1 + y_1$$

$$y = (6.56)(12) - .30 + 8.1 = 86.56$$

$$y = (6.56)(24) - .30 + 8.1 = 165.24$$

• función =

$$y = \int 6.56x + 8.1 \quad \Big|_{-.30}^{12}$$

$$f(x) \Big|_a^b = f(b) - f(a)$$

$$f(x) = \int 6.56 dx + \int 8.1 dx$$

$$= 6.56 \int \frac{x^{1+1}}{1+1} + 8.1 \int dx$$

$$= 6.56 \frac{x^2}{2} + 8.1x$$

$$a) \left[\frac{6.56(12)^2}{2} + 8.1(12) \right] - \left[\frac{6.56(.30)^2}{2} + 8.1(.30) \right] =$$

$$\left[\frac{944.64}{2} + 97.2 \right] - \left[\frac{0.59}{2} + 2.43 \right] = 569.52 - 2.72 = 566.8$$

$$b) \left[\frac{6.56(24)^2}{2} + 8.1(24) \right] - \left[\frac{6.56(.30)^2}{2} + 8.1(.30) \right] =$$

$$\left[\frac{3778.56}{2} + 194.4 \right] - \left[\frac{0.59}{2} + 2.43 \right] = 2083.68 - 2.72 = 2.080$$