



Universidad del Sureste

Campus Comitán de Domínguez Chiapas

Licenciatura en Medicina Humana

Tema: poniendo límites

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Grupo: "B"

Grado: segundo Semestre.

Materia: Biomatemáticas

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## TAREA 1

Boston Velocite Hermond

$$\lim_{x \rightarrow 2.5} x^2 = 2.5^2 = 6.25$$

$$\lim_{x \rightarrow 1.5} x^2 = (1.5)^2 = 2.25$$

$$\lim_{x \rightarrow 3} x^2 = (3)^2 = 9$$

$$\lim_{x \rightarrow 1} \frac{x^2 - 1}{x - 1} = \frac{(x+1)(x-1)}{(x-1)} = x+1 = (1+1) = 2$$

## TAREA 2

$$\lim_{x \rightarrow 2} \frac{x^2 + x - 6}{x - 2}$$

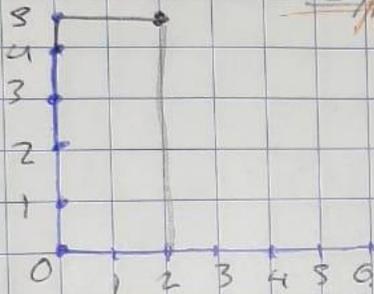
$$\frac{(2)^2 + 2 - 6}{2 - 2}$$

$$\lim_{x \rightarrow 2} = \frac{(x-2)(x+3) - x+3}{(x-2)}$$

$$\frac{4 + 2 - 6}{0}$$

$$= 2 + 3 = 5$$

$$\frac{6 - 6}{0} = \frac{0}{0}$$



$$\lim_{x \rightarrow -4} \frac{x^2 + 5x + 4}{x^2 + 3x - 4}$$

$$\lim_{x \rightarrow -4} = \frac{(x+4)(x+1)}{(x-1)(x+4)}$$

$$\frac{(-4)^2 + 5(-4) + 4}{(-4)^2 + 3(-4) - 4}$$

$$\frac{(x+1)}{(x-1)} = \frac{-4+1}{-4-1}$$

$$= \frac{16 - 20 + 4}{16 - 12 - 4} = 0$$

$$= \frac{-3}{-5}$$

TRABA 3.

$$\lim_{t \rightarrow 6} 80t = 80 = \lim_{t \rightarrow 6} t$$

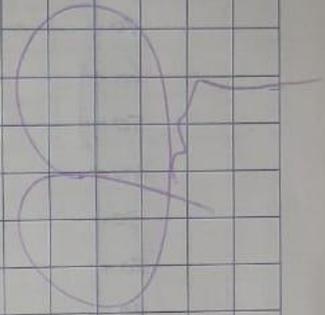
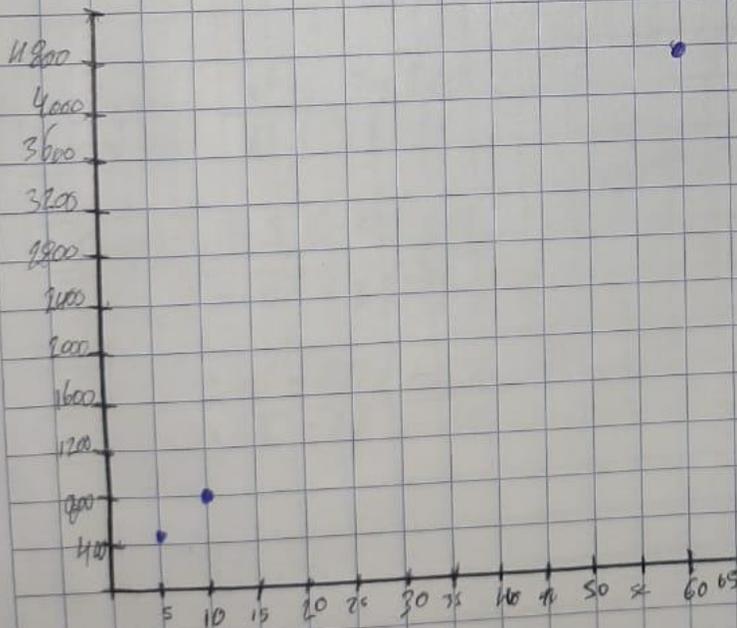
$$= (80)(6) = 480 = 2^{\text{m.}}$$

$$\lim_{t \rightarrow 9} 80t = 80 \lim_{t \rightarrow 9} t$$

$$(80)(9) = 720 = 5^{\text{m.}}$$

$$\lim_{t \rightarrow 55} 80t = \lim_{t \rightarrow 55} t = 80$$

$$= (80)(55) = 4400 = 11^{\text{m.}}$$



# APONTES

$$\lim_{x \rightarrow a} C = C \quad \lim_{x \rightarrow 2} 5 = 5$$

$$\lim_{x \rightarrow a} x = a \quad \lim_{x \rightarrow 2} x = 2$$

$$\lim_{x \rightarrow a} x^2 = a^2 \quad \lim_{x \rightarrow 2} x^2 = 4$$

$$\lim_{x \rightarrow 2} 2x$$

$$2 \lim_{x \rightarrow 2} x = 2(2) = 4$$

$$\lim_{x \rightarrow 3} -9x^2 = -9 \lim_{x \rightarrow 3} x^2 = -9(3^2) = -81$$

$$\lim_{x \rightarrow 8} 6x^2 = 6(8)^2 = 384$$

$$= 6(8) = 48$$

$x = k$   
 PH 6       $C^0$  sat  $0^2$  Ho?       $K_2$   
 PH 9       $P0^2$  mostr 80  
 PH 5.5

cl pontes

Divisor

$$\lim_{x \rightarrow 2} (4x)(3x)$$

$$4 \lim_{x \rightarrow 2} 2 \cdot 3 \lim_{x \rightarrow 2} 2$$

$$= 4(2) \cdot 3(2)$$

$$8 \cdot 6$$

$$48$$

$$\lim_{x \rightarrow 4} 3x \div 4x$$

$$x-4 \sqrt{15} = x-4$$

$$3 \lim_{x \rightarrow 4} = 4 \div 4$$

$$3 \cdot 4 = 4 \cdot 4$$

$$0.75 \cdot 4$$

$$\lim_{x \rightarrow 4} 3x \cdot 6x$$

$$3 \lim_{x \rightarrow 4} 4 \cdot 6 \lim_{x \rightarrow 2}$$

$$= 3(4) \cdot 4(6)$$

$$= 12 \cdot 24$$

$$= 288$$

$$\lim_{x \rightarrow 5} 4 \cdot 8x$$

$$x = 5$$

$$\lim_{x \rightarrow 5} \frac{3x - 12}{4x - 19}$$

$$3 \lim_{x \rightarrow 5} 5 - 12$$

$$3(5) - 5(12)$$

$$15 - 60$$

$$3(5) - 12 = 15 - 12 = 3$$

$$4(5) - 19 = 20 - 19 = 1$$

# APONTES.

$$\lim_{x \rightarrow a} [f(x)]^n = \left[ \lim_{x \rightarrow a} f(x) \right]^n$$

$$\lim_{x \rightarrow 3} 2x^3 = \lim_{x \rightarrow 3} (2)(3)^3 = 216$$

$$\lim_{x \rightarrow 3} 2x^3 = 2 \cdot 6^3 = 216$$

$$\lim_{x \rightarrow a} \sqrt[n]{x} = \sqrt[n]{a}$$

$$\lim_{x \rightarrow 2} \sqrt[3]{4x}$$

$$\frac{\lim_{x \rightarrow 2} 3}{\lim_{x \rightarrow 2} 4} = \frac{3}{4}$$

limite

$$\lim_{x \rightarrow 2} \sqrt[3]{(1)(2)} = \sqrt[3]{2} = 2$$

$$S = \begin{cases} 2^2 & \text{si } 2 < 2 = 4 \\ 4 - 5 & \text{si } 2 = 2 = 4 \\ 6 - 2x & \text{si } x = 72 = 2. \end{cases}$$

Calcular lim. f(x)

$$f(x) = \begin{cases} x^2 + 1 & \text{si } x < 1 \\ 2x & \text{si } x > 1 \end{cases}$$

$$f(x) = \begin{cases} 1^2 + 1 & \text{si } 1 < 1 \\ 2(1) & \text{si } 1 > 1 \end{cases}$$