



Poniendo límites

Materia: Biomatemáticas

Nombre del alumno: Joan Natael Rojas Velázquez

Grado: Segundo semestre

Grupo: B

PASIÓN POR EDUCAR

Catedrático: Rosvani Margine Morales Irecta

Joan Nofael

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

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

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

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

$$\lim_{x \rightarrow 6.6} x^2$$

$$(6.6)^2 = 43.56$$

$$\lim_{x \rightarrow 7.6} x^2$$

$$(7.6)^2 = 57.76$$

$$\lim_{x \rightarrow 7.8} x^2$$

$$(7.8)^2 = 60.84$$

$$\lim_{x \rightarrow 8} x^2$$

$$(8)^2 = 64$$

21-02-2014

$$\lim_{x \rightarrow 6.6} x^3 = (6.6)^3 = 287.249$$

$$\lim_{x \rightarrow 7.6} x^3 = (7.6)^3 = 438.97$$

$$\lim_{x \rightarrow 7.8} x^3 = (7.8)^3 = 474.55$$

$$\lim_{x \rightarrow 8} x^4 = (8)^4 = 4096 = 2$$

$$\lim_{x \rightarrow 2} \frac{x^2 + x - 6}{x - 2} = \frac{(x-2)(x+3)}{x-2} = x+3$$

$$2+3=5$$

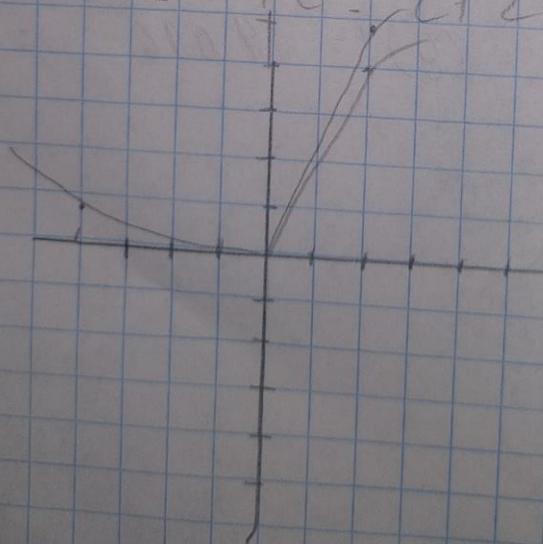
$$\lim_{x \rightarrow -4} \frac{x^2 + 5x + 4}{x^2 + 3x - 4} = \frac{(x+4)(x+1)}{(x-1)(x+4)}$$

$$x+1 = (-4+1)$$

$$= -3$$

$$\lim_{x \rightarrow 2} \frac{x^2 - 4}{x - 2} = \frac{(x-2)(x+2)}{x-2}$$

$$= x+2 = 2+2=4$$

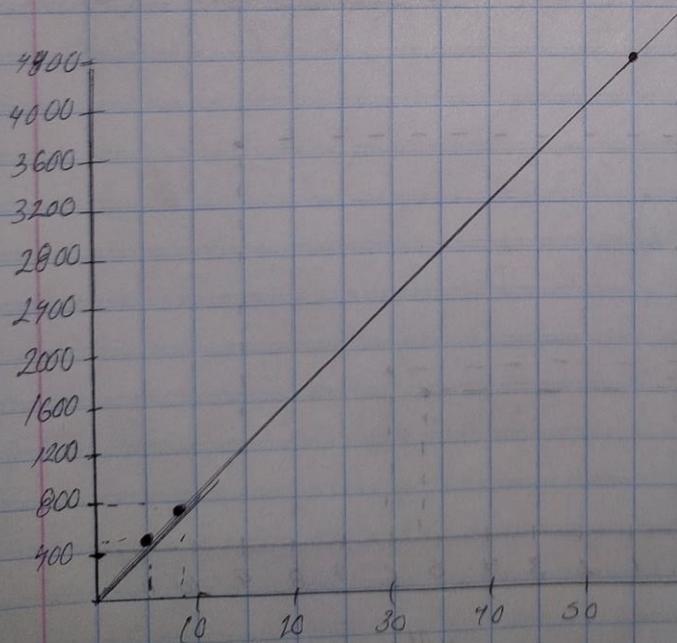


18-02-2022

$$1. \lim_{x \rightarrow 6} 80x = 80 \lim_{x \rightarrow 6} x \\ = (80)(6) = \underline{480}$$

$$2. \lim_{x \rightarrow 9} 80x = 80 \lim_{x \rightarrow 9} x \\ = (80)(9) = \underline{720}$$

$$3. \lim_{x \rightarrow 5.5} 80x = 80 \lim_{x \rightarrow 5.5} x \\ = (80)(5.5) = \underline{440}$$

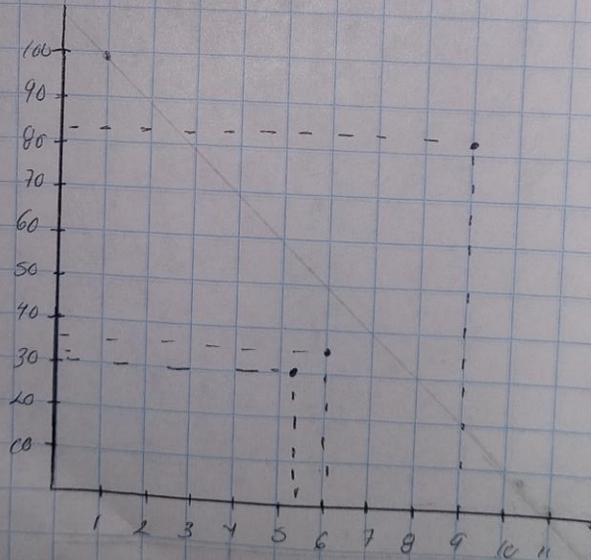


$$\lim_{x \rightarrow 6} 6x = 6 \stackrel{\text{lim } x}{x \rightarrow 6} = 6 \cdot 6 = 36, \quad \checkmark$$

$$\lim_{x \rightarrow 9} 9x = 9 \stackrel{\text{lim } x}{x \rightarrow 9} = 9 \cdot 9 = 81, \quad \checkmark$$

$$\lim_{x \rightarrow 5.5} 5.5x = 5.5 \stackrel{\text{lim } x}{x \rightarrow 5.5} = 5.5 \cdot 5.5 = 30.25, \quad \checkmark$$

Sat O² Ab. \checkmark



pH

18-02-2022

$$2. \lim_{x \rightarrow 2} 3x + 4x$$

$$\lim = 3(2) + 4(2)$$

$$= 6 + 8 = 14$$

$$= 3(2) + 4(2)$$

$$= 6 + 8$$

$$= 14$$

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

$$4 \lim_{x \rightarrow 2} = 4 \cdot 2 = 8$$

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

$$(8)(6) = 48$$

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

$$= 8 \cdot 6$$

$$= 48$$

$$0) \lim_{x \rightarrow 4} 3x \cdot 6x$$

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

$$= 12 \cdot 24$$

$$= 288$$

~~5)~~

$$5) \lim_{x \rightarrow 4} \frac{3x}{4x}$$

$$= \frac{3(4)}{4(4)}$$

$$= \frac{12}{16}$$

$$= 0.75$$

$$3 \lim_{x \rightarrow 4} x = 3 \cdot 4 = 12$$

$$4 \lim_{x \rightarrow 4} x = 4 \cdot 4 = 16$$

$$12 \div 16 = 0.75$$

18-01-2022

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

$$\frac{3(5) - 12}{4(5) - 19} = \frac{15 - 12}{20 - 19} = \frac{3}{1} = 3$$

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

$$\begin{aligned} \lim_{x \rightarrow 3} 2x^3 &= (2)(3)^3 = 6 \\ &= 216 \end{aligned}$$

$$\lim_{x \rightarrow 3} 2x^3$$

$$= 2(3)^3 = 2 \cdot 27 = 54$$

$$= 6^3$$

$$= 216$$

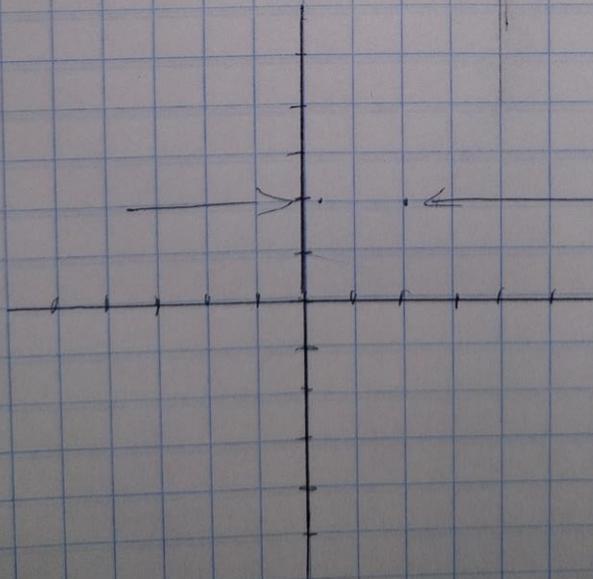
Calcular $\lim_{x \rightarrow 2} f(x)$

$$f(x) = \begin{cases} x^2 & \text{si } x < 2 \\ 4 & \text{si } x = 2 \\ 6 - 2x & \text{si } x > 2 \end{cases}$$

$$\begin{cases} 2^2 & \text{si } 2 < 2 \\ 4 & \text{si } 2 = 2 \\ 6 - 2(2) & \text{si } 2 > 2 \end{cases}$$

$$\begin{cases} 4 & \text{si } 2 < 2 = 4 \\ 4 & \text{si } 2 = 2 = 4 \\ 6 - 4 & \text{si } 2 > 2 = 2 \end{cases}$$

$$2 \text{ si } 2 = 2 = 2$$



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

$$\begin{aligned} 1 + 1 & \text{ si } 1 < 1 & = 2 & \text{ si } 1 < 1 \\ 2 & \text{ si } 1 > 1 & = 2 & \text{ si } 1 > 1 \end{aligned}$$

