universidad del sureste

campus Comitán

Licenciatura en medicina humana

PONIENDO LIMITES

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Grado: 1 Grupo: A

Materia: Biomatematicas

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LIMITES

08-02-22

- $\lim_{x \to 2.5} x^2$ $\quad x = 6.25$

  $x = (2.5)(2.5) = 6.25$

  125
  50
  6.25

- $\lim_{x \to 1.5} x^2$ $\quad x = 2.25$

  $x = (1.5)(1.5) = 2.25$

  15
  2.25

- $\lim_{x \to 3} x^2$ $\quad x = 9$

  $x = 9$

- $\lim_{x \to 1} \frac{x^2-1}{x-1}$ $\quad x = 2$

  $\frac{1^2-1}{1-1} = \frac{0}{0}$

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

- $\lim_{pH \to 7.2} x^2$

  $(7.2)(7.2) 51.84$ $\quad R = 51.84$

  144
  504
  51.84

- $\lim_{pH \to 7.4} x^2$

  $(7.4)(7.4)$ $\quad R = 54.76$

  296
  518
  54.76

- $\lim_{pH \to 7.6} x^2$

  $(7.6)(7.6)$ $\quad R = 57.76$

  456
  532
  57.76

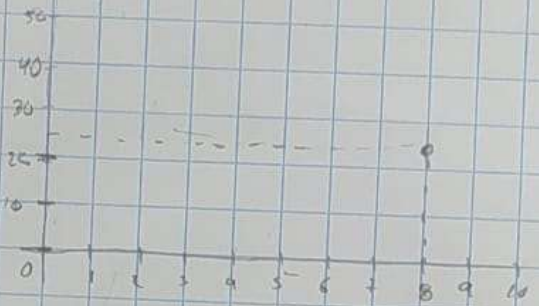
$\lim x^2$
$pH \to 6.6 = 43.56$

$\lim x^2$
$pH \to 7.6 = 57.76$

$\lim x^2$
$pH \to 7.8 = 60.84$

$\lim x^2 = 64$
$pH \to 8$

4096	2
2048	2
1024	2
512	2
256	2
128	2
64	2
32	2
16	2
8	2
4	2
2	2
1	



MCD 2

B – 100%
2 – ? = 25%

Limites

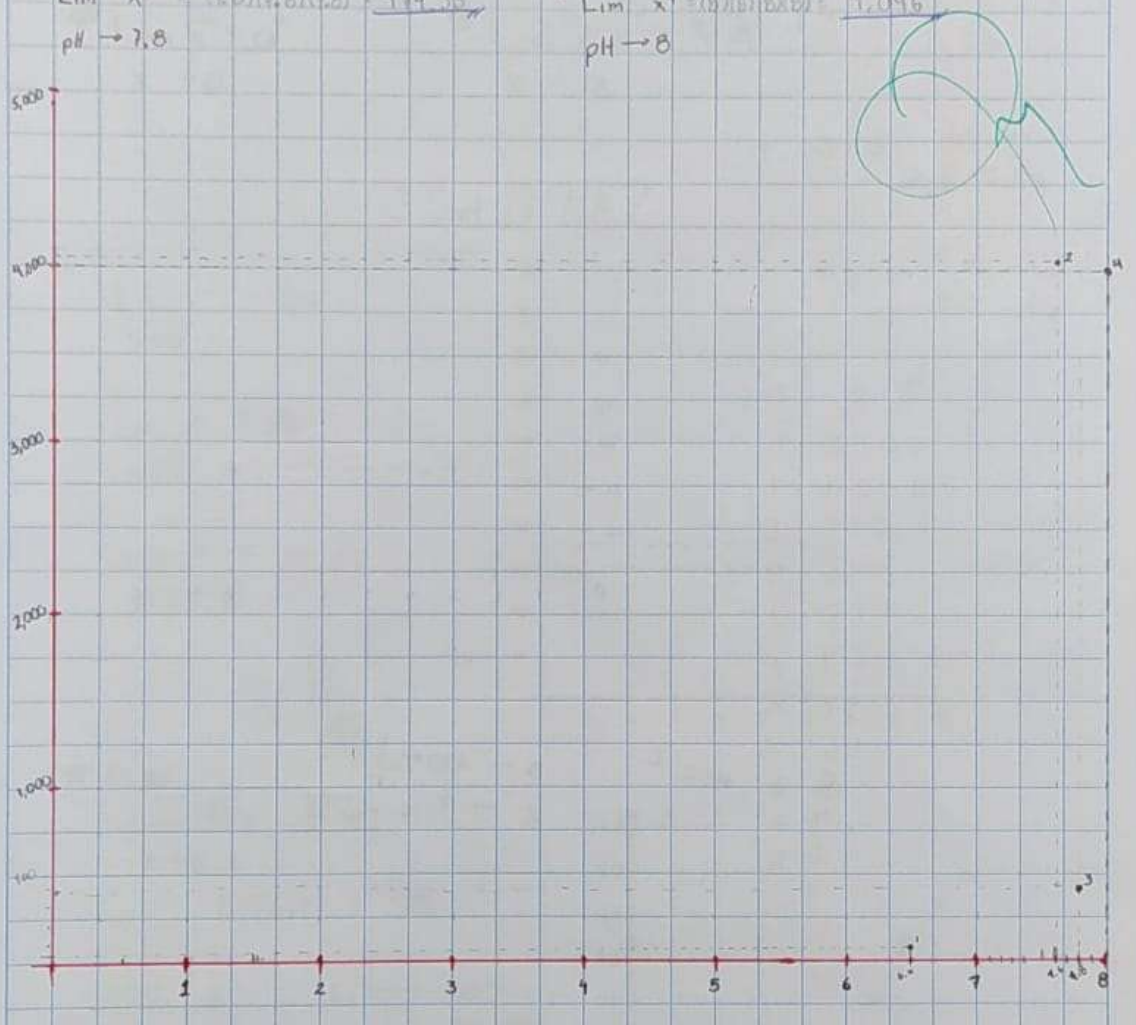
09 - 02 - 22

1. Lim x^2 $(6.6)(6.6) = 43.56$
   pH → 6.6

2. Lim x^3 $(7.8)(7.8)(7.8) = 474.55$
   pH → 7.8

3. Lim x^4 $(8)(8)(8)(8) = 4,096$
   pH → 8

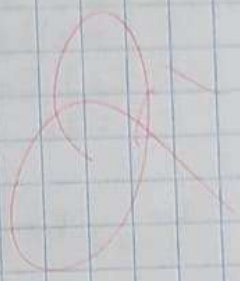
4. Lim x^1 $(7.6)(7.6)(7.6) = 438.97$
   pH → 7.6



Limberg Emanuel Altuzar López

Limites Basicos

- $\lim_{x \to a} c = c$
- $\lim_{x \to a} x = a$
- $\lim_{x \to a} x^n = a^n$
- $\lim_{x \to a} \sqrt[n]{x} = \sqrt[n]{a}$

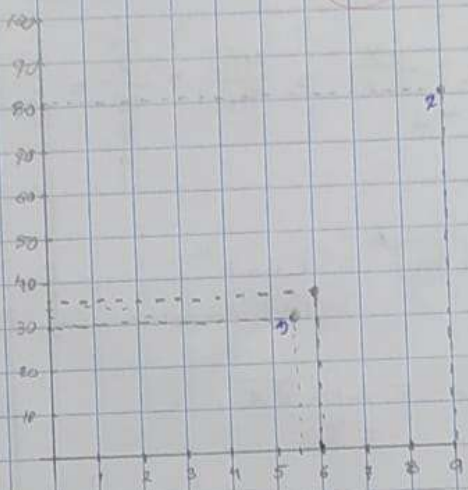


¿Sat 0=46?

$\lim_{x \to 6} x^2 = 36$

$\lim_{x \to 9} x^2 = 81$

$\lim_{x \to 5.5} x^2 = 30.25$



* $c = 80$

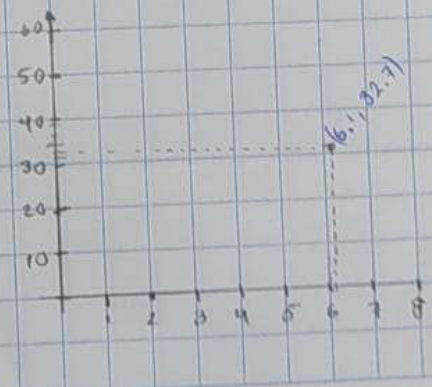
$\lim_{x \to 6.1} 80x$

$80(6.1) = 488$

488	2
244	2
122	2
61	61
1	/

6.1 — 100%

2 — $2.78



3#:-

$$\lim_{x \to 3} [2x \cdot 4x]$$

$$\left[2 \lim_{x \to 3} x\right]\left[4 \cdot \lim_{x \to 3} x\right]$$

$$[2(3)][4 \cdot (3)]$$

$$[6][12]$$

$$= 72$$

4#:- $\lim_{x \to a} f(x) \div g(x) = \lim_{x \to a} f(x) \div \lim_{x \to a} g(x) = L \div M, M \neq 0$

$$\lim_{x \to 2} \frac{4x}{8x} = \frac{4(2)}{8(2)} = \frac{8}{16} = 2 \div 0.5$$

$$\lim_{x \to a} [f_x]^n = \lim_{x \to a} x^n = [a]^n$$

$$\lim_{x \to a} \sqrt{f_x} = \lim_{x \to a} \sqrt{x} = \sqrt{a}$$

① $\lim_{x \to 2} \frac{4x + 2x}{3x - 2x} = \frac{[4(2)] + [2(2)]}{[3](1)] + [-2(2)]} = \frac{8 + 4}{6 - 4} = \frac{12}{2} = 6$

$\frac{[4)(2)] + [(2)(2)]}{[(3)(2)] - [(2)(2)]} = \frac{8}{6} + \frac{4}{3} = 1.3^{x}$

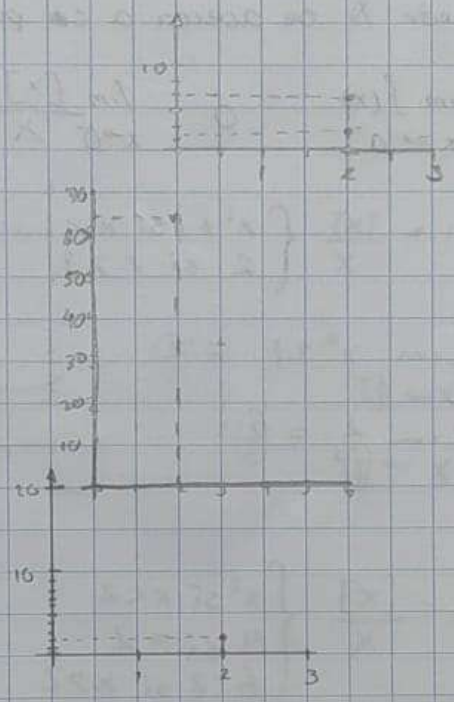
② $\lim_{x \to 2} (2x)^3 = [(2)(2)]^3$

$[4]^3 = 64$

③ $\lim_{x \to 2} \sqrt{2x} = \sqrt{2(2)}$

$= \sqrt{4}$

$= 2$



LIMITES LATERALES

- Cuando x se acerca a c por la derecha

$$\lim_{x \to a^+} f(x) \quad \text{ó} \quad \lim_{x \to 0^+} \frac{[x]}{x}$$

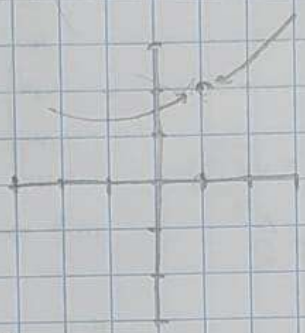
- Cuando x se acerca a c por izquierda

$$\lim_{x \to a^-} f(x) \quad \text{ó} \quad \lim_{x \to 0^-} \frac{[x]}{x}$$

$$f(x) = \frac{[x]}{x} \begin{cases} x^2 + 1 \text{ si } x \leq 1 \\ 2 \text{ si } x > 1 \end{cases}$$

$$\lim_{x \to 1} x^2 + 1 = 2$$

$$\lim_{x \to 1^+} 2 = 2$$



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

$$\lim_{x \to 2^+} x^2 = 4$$

$$\lim_{x \to 2} 4 = 4$$

$$\lim_{x \to 2} 6 - 2x = 2$$