Universidad del sureste

Campus Comitán

Licenciatura medicina humana

Tema:

Poniendo limites

Materia:

Biomatematicas

Alumna:

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Grupo: “A”

Grado: 2°

Docente:

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Comitán de Domínguez Chiapas a 20 de febrero del 2022

VERYGREEN

Ejercicio graficada

8/Feb/2022

1. $\lim x^2 = pH\ 6.6$

$x = 6.6 = (6.6)(6.6) = 43.56$ $x^2 = 43.56$

2. $\lim x^3 = pH\ 7.6$ 438.976

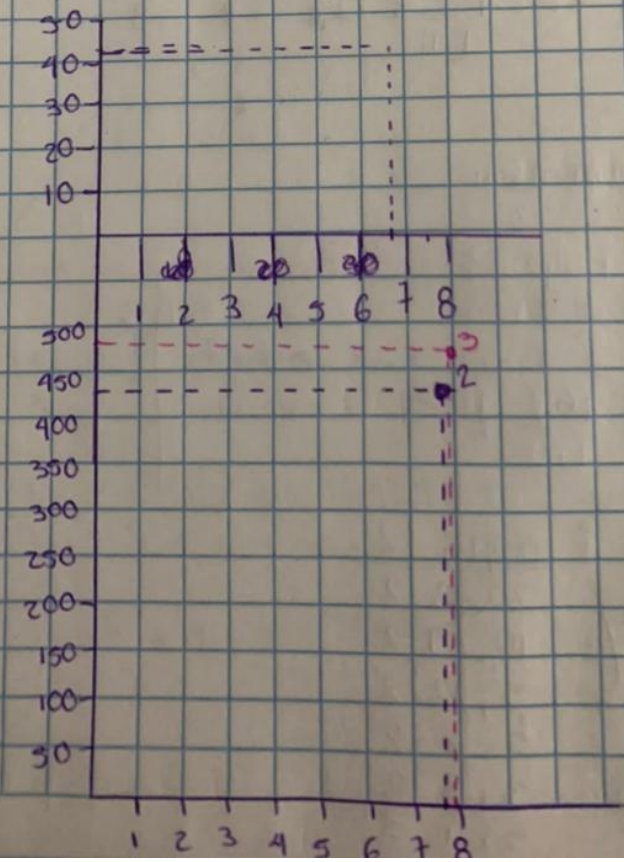
7.6×7.6 $x^2 = 57.76$

3. $\lim x^3 = pH\ 7.8$ 474.552 $x^2 = 60.84$

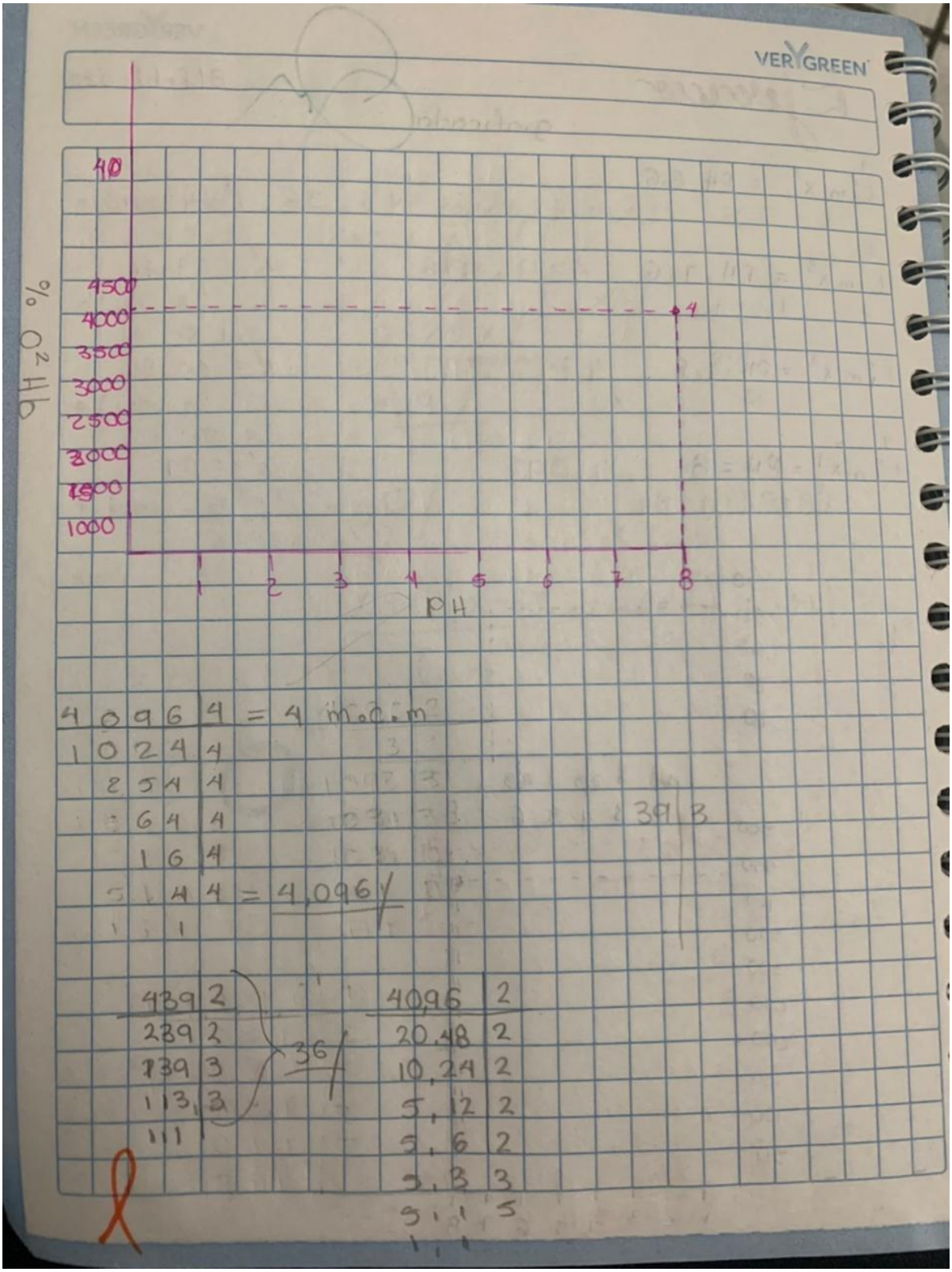
4. $\lim x^4 = pH = 8$ 4,096 $x^2 = 64$

$(8)(8)(8)(8)$

1.



2. 3


VERYGREEN
40
4500
4000
3500
3000
2500
3000
1500
1000
% O² Hb
1 2 3 4 5 6 7 8
PH
4
4096 4 = 4 m.c.m
1024 4
256 4
64 4
16 4
4 4 = 4,096
1
439 2
239 2
139 3
113 3
1 1 1
36
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 1
39,8

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Paola Ope Hilerio 612

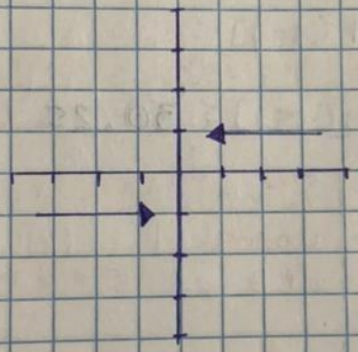
Limites laterales

- cuando x se acerca a c por la derecha

$\lim_{x \to a^+} f(x)$ o $\lim_{x \to 0^+} \frac{|x|}{x}$

- cuando x se acerca a c por la izquierda

$\lim_{x \to a^-} f(x)$ o $\lim_{x \to 0^-} \frac{|x|}{x}$



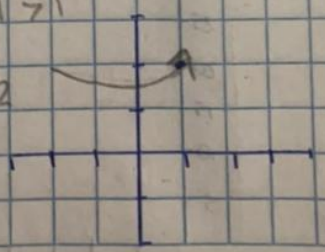
Ejemplos de ejercicio

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

$$f(1)\ \frac{1}{1} = \begin{cases} (1)(1)+1 & \text{si } 1 \geq 1 \\ 2 & \text{si } 1>1 \end{cases} = 2 \quad \text{si } 1<4 \quad (2)$$

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

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



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PH 6 c sat O^2 Hb?

PH 9

PH 55 ① $\lim_{x \to 6} K[+(6)]$

$\lim K K[6(6)] = 36\%$

② $\lim_{L} K[+(9)]$

$x \to 9$

$K[9(9)] = 81\%$

③ $\lim_{x \to 55} K[+(55)]$

$K[55(55)] = 30.25$

$C = 80 \quad \lim_{x \to 6.1} 80x$

$\lim_{x \to 61} (8)(61) = 488\%$

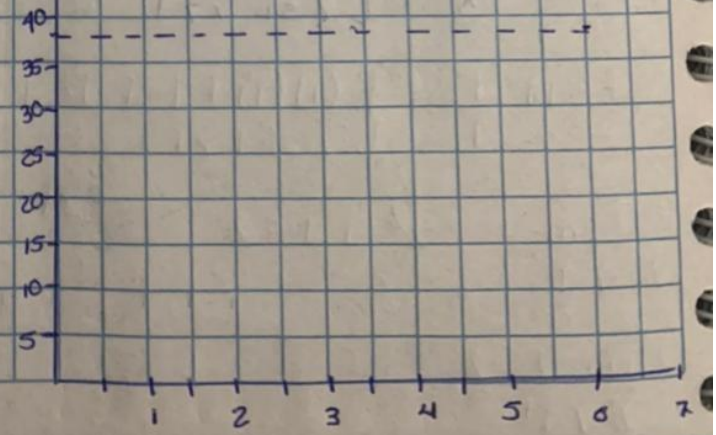
m.c.m

488 | 2
244 | 2
122 | 2
61 | 61
1 | 1

2

6.1 : 100
2 : x X = ?

32.78 %



VERTGREEN

Propiedades de los límites

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

(1) $\lim_{x \to a} k[f(x)] = k \lim_{x \to a} f(x) = kL$

$\lim_{x \to 2} 4[F(x)]$ simple

$\lim_{x = 2} 4[2] = 8$

$k\left[\lim_{x \to 2} (fx)\right] = 2(2) = 4$ paso a paso

(2) $\lim_{x \to a} f(x) \pm g(x) = \lim_{x \to} + (x) \pm \lim_{x \to a} g(x) = L \pm M$

paso simple

$\lim_{x \to 3} 2x + 3x = 6 + 9 = 15$

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

(3) $\lim_{x \to a} f(x) * g(x) = \lim_{x \to a} f(x) * \lim_{x \to a} g(x) = L \times M$

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

$\lim_{x \to 3} [2(3) * 4(3)] = 6 * 12$

$\lim = 72$

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

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

$\lim_{x \to a} \frac{f(x)}{g(x)} \quad \lim_{x \to 2} \frac{4x}{8x} = \frac{4(2)}{8(2)} = \frac{8}{16} = 0.5$

Tarea

$\lim_{x \to 2} \lim \frac{4x + 2x}{3x - 2x}$ ①

con raíz

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

$\downarrow \quad \downarrow$

$6 \quad 6$

6

$\lim_{x \to a} [fx] = \lim_{x \to a} x^n$ ②

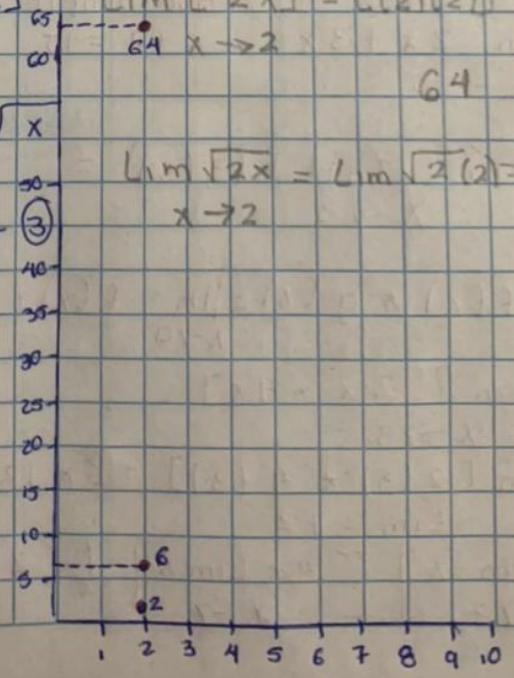
$= [a]^n \quad \lim_{x \to 2} [2x]^3 \quad \lim_{x \to 2} [2x]^3 = [(2)(2)]^3 [4]^3 = 4^3 =$

$64 \quad 64$

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

$\lim_{x \to 2} \sqrt{2x} = \lim_{x \to 2} \sqrt{2(2)} = \lim_{x \to 2} \sqrt{4} = 2$

$= \sqrt[2]{a} \quad \lim_{x \to 2} \sqrt{2x}$ ③



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

① $fx = (2)(2)$ si $x<2 = ④$ si $x<2$

② $fx \cdot 4$ si $2=2$ constante

$fx = 6-2x$ si $2>2 = 2$

$x \to 2$

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