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Nombre del trabajo: Tareas .

Materia: Biomatemáticas .

Grado: 1

Grupo: A.

Comitán de Domínguez Chiapas a 20 de febrero de 2022.

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Biomatemáticas.

- Uso de herramientas de las matemáticas para el análisis de cuestiones y temas de la biología.

Límite Magnitud a la que se acercan progresivamente los términos de una secuencia infinita.

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

$$\textcircled{1} \lim_{x \rightarrow 2.5} x^2 = 6.25.$$

$$\textcircled{2} \lim_{x \rightarrow 1.5} x^2 = 2.25.$$

$$\textcircled{3} \lim_{x \rightarrow 3} x^2 = 9.$$

$$\lim_{x \rightarrow 7.2} x^2 = 51.84$$

$$\lim_{x \rightarrow 7.4} x^2 = 54.76.$$

$$\lim_{x \rightarrow 7.6} x^2 = 57.76.$$

$$\textcircled{4} \lim_{x \rightarrow 1} \frac{x^2 - 1}{x - 1}$$

$$\lim_{x \rightarrow 1} (x) - 1$$

$$x - 1$$

$$\lim_{x \rightarrow 1} \frac{(x) - 1}{(1) - 1} = \frac{0}{0} = \textcircled{2}$$

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

$$\lim = \frac{1-1}{0} = 0$$

Biomatematicas.

9/02/2022.

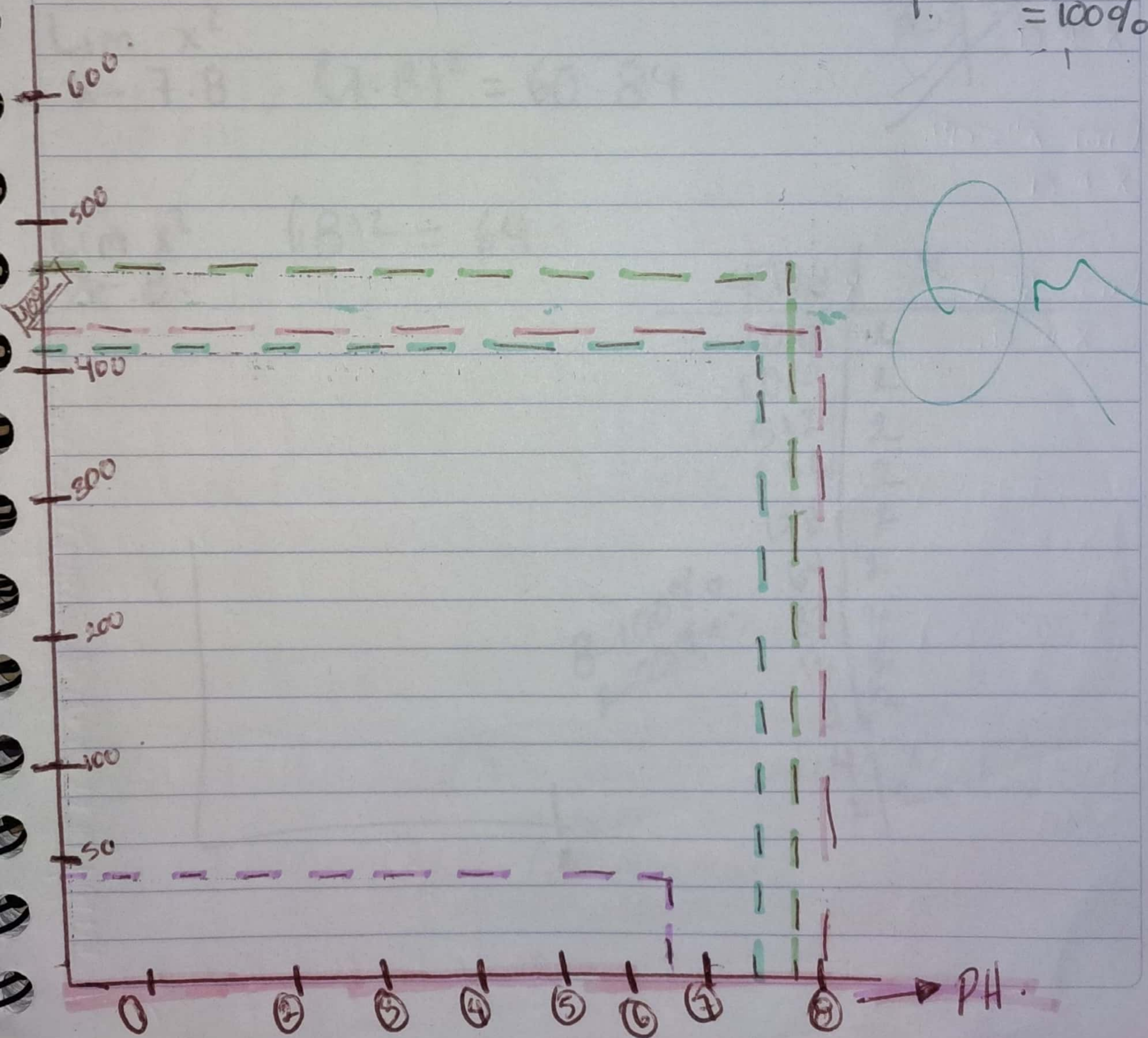
① $\lim_{x \rightarrow 6.6} x^2 (6.6)^2 = 49.56$

② $\lim_{x \rightarrow 7.6} x^3 (7.6)^3 = 438.976$

③ $\lim_{x \rightarrow 7.3} x^3 (7.8)^3 = 474.552$

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

$\frac{4096}{2 \cdot 2} = 25\%$
 $= 100\%$



Biomatemáticas.

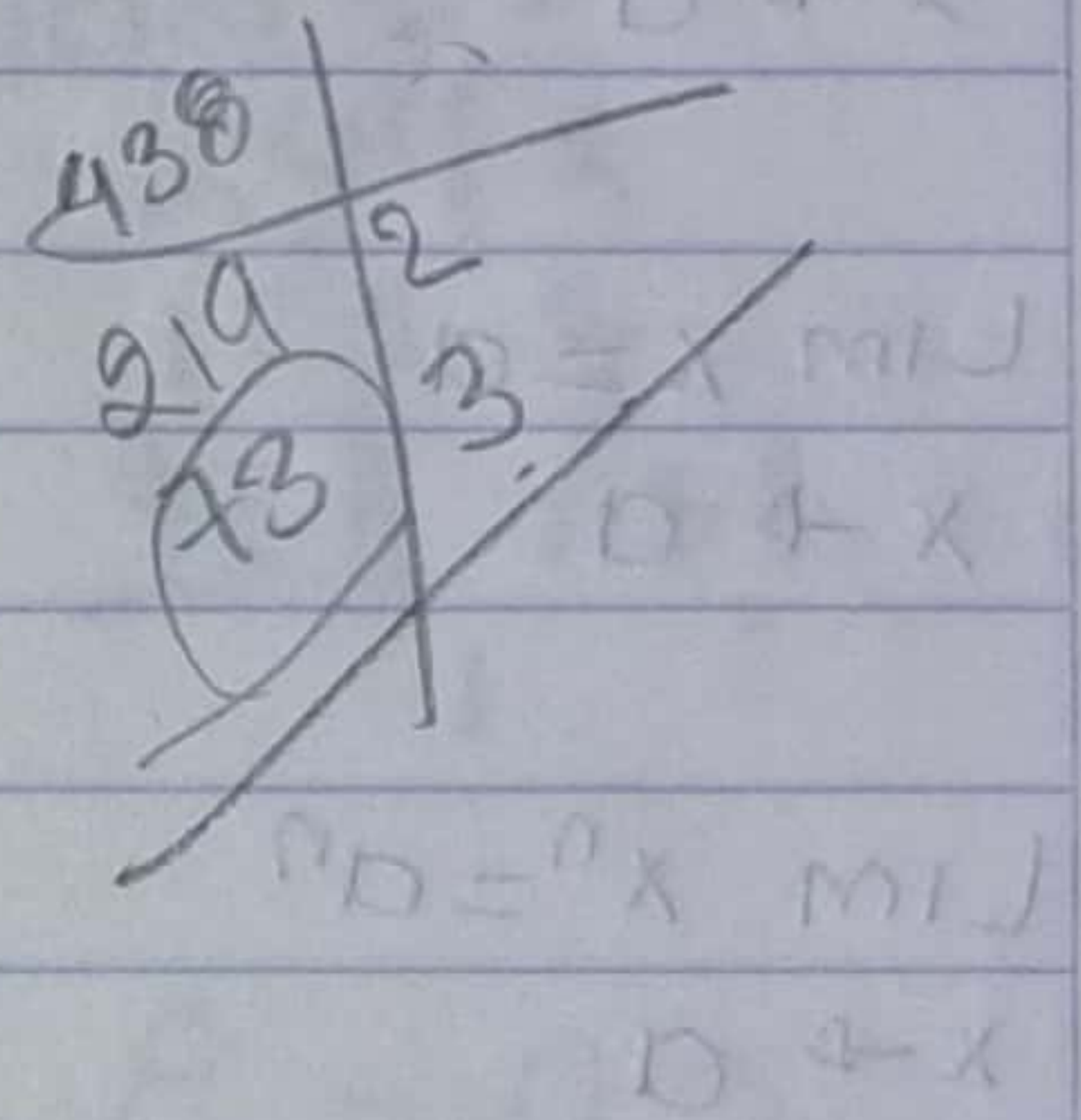
09/12/2022.

$$\lim_{x \rightarrow 6.6} x^2 = (6.6)^2 = 43.56$$

$$\lim_{x \rightarrow 7.6} x^2 = (7.6)^2 = 57.76$$

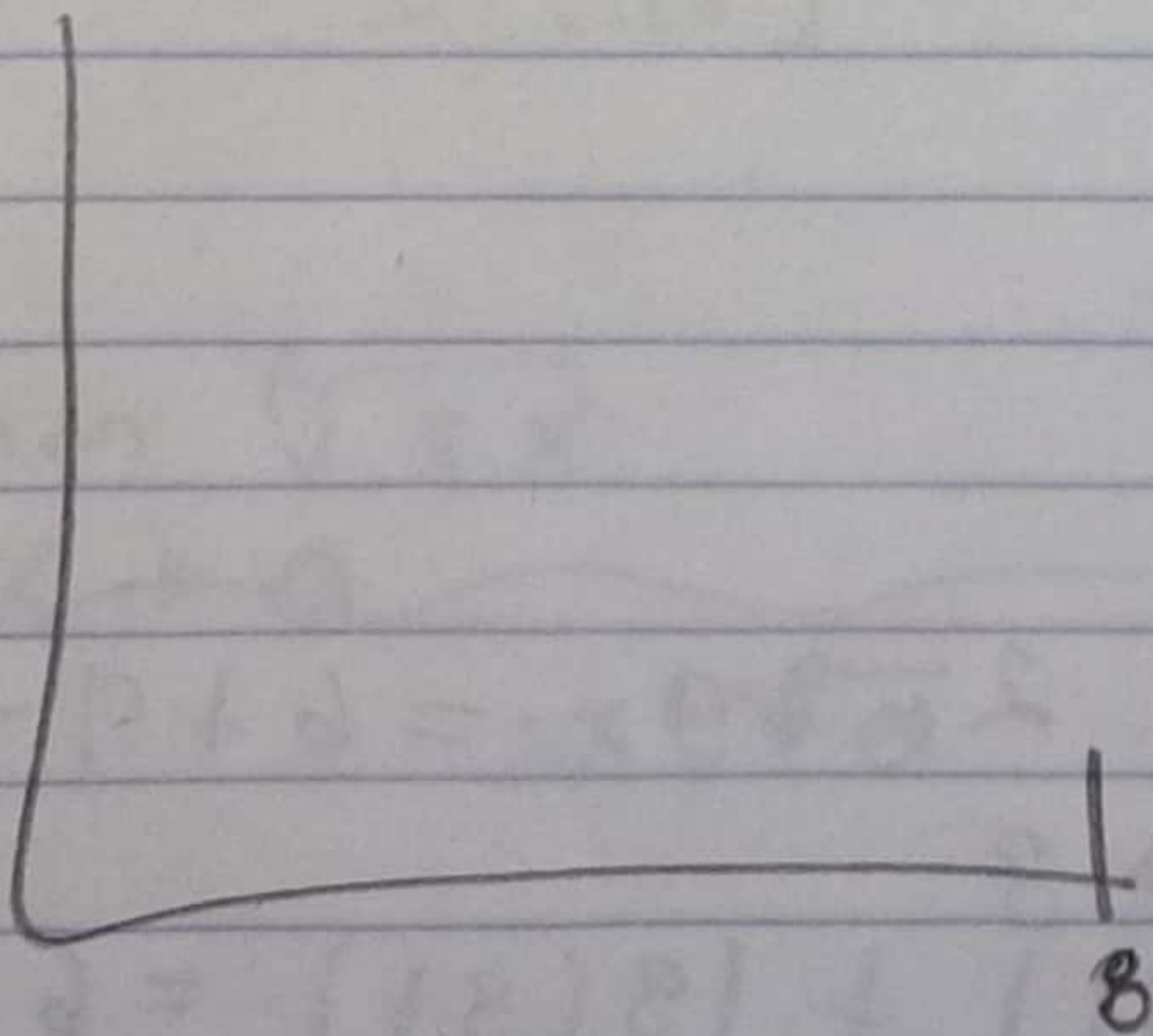
$$\lim_{x \rightarrow 7.8} x^2 = (7.8)^2 = 60.84$$

$$\lim_{x \rightarrow 8} x^2 = (8)^2 = 64$$



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

8-100%
2-25%



Ejercicios en el aula.

$$\textcircled{1} \lim_{x \rightarrow a} h[F(x)] = h \lim_{x \rightarrow a} F(x) = hL.$$

$$\textcircled{2} \lim_{x \rightarrow a} F(x) \pm g(x) = \lim_{x \rightarrow a} F(x) \pm \lim_{x \rightarrow a} g(x) = L \pm m.$$

$$\lim_{x \rightarrow a} c = c$$

$$x \rightarrow a$$

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

$$x \rightarrow a$$

$$\lim_{x \rightarrow a} x^n = a^n$$

$$x \rightarrow a$$

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

$$x \rightarrow a.$$

$$\lim_{x \rightarrow 2} h[F(x)]$$

$$x \rightarrow 2$$

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

$$x \rightarrow 2.$$

$$h \left[\lim_{x \rightarrow 2} (F(x)) \right] = 2(2) = 4.$$

$$\lim_{x \rightarrow 3} f(x) \pm g(x).$$

$$x \rightarrow 3$$

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

$$x \rightarrow 3$$

$$\lim_{x \rightarrow 3} (2(3)) + (3(3)) = 6 + 9 = 15.$$

Ejercicios en clase.

$$\lim_{x \rightarrow a} k [F(x)] = \lim 6(2) = 36.$$

$$\textcircled{2} \lim 9(2) = 81$$

$$\textcircled{3} \lim 5 \cdot 5(2) = 30 \cdot 25.$$

$$\star \lim [(2(8))] \cdot [(4(8))]$$

$$\lim [(6)(12)]$$

$$\lim (72)$$

$$\begin{array}{r} 488 \div 2 \\ \underline{244} \\ 122 \\ \underline{61} \\ 61 \\ \underline{61} \\ 1 \end{array}$$

$$\star \lim_{x \rightarrow d} F(x) \div g(x)$$

$$\lim_{x \rightarrow 2} \frac{4x}{8x} = \frac{4(2)}{8(2)} = \frac{8}{16} = 0.5.$$

$$\textcircled{1} \lim_{x \rightarrow 2} \frac{4x + 2x}{3x - 2x}$$

$$\lim F(x)^n \textcircled{2} = [a]^n.$$

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

$$(2(2))^3 = 8^2$$

$$\textcircled{3} \lim_{x \rightarrow a} \sqrt[n]{F(x)}$$

$$= \sqrt[n]{a}$$

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

$$\begin{array}{r} \sqrt{2(2)} \\ \sqrt{4} \\ \sqrt{2} \end{array}$$

Actividad 2

Miércoles 16/02/2022.

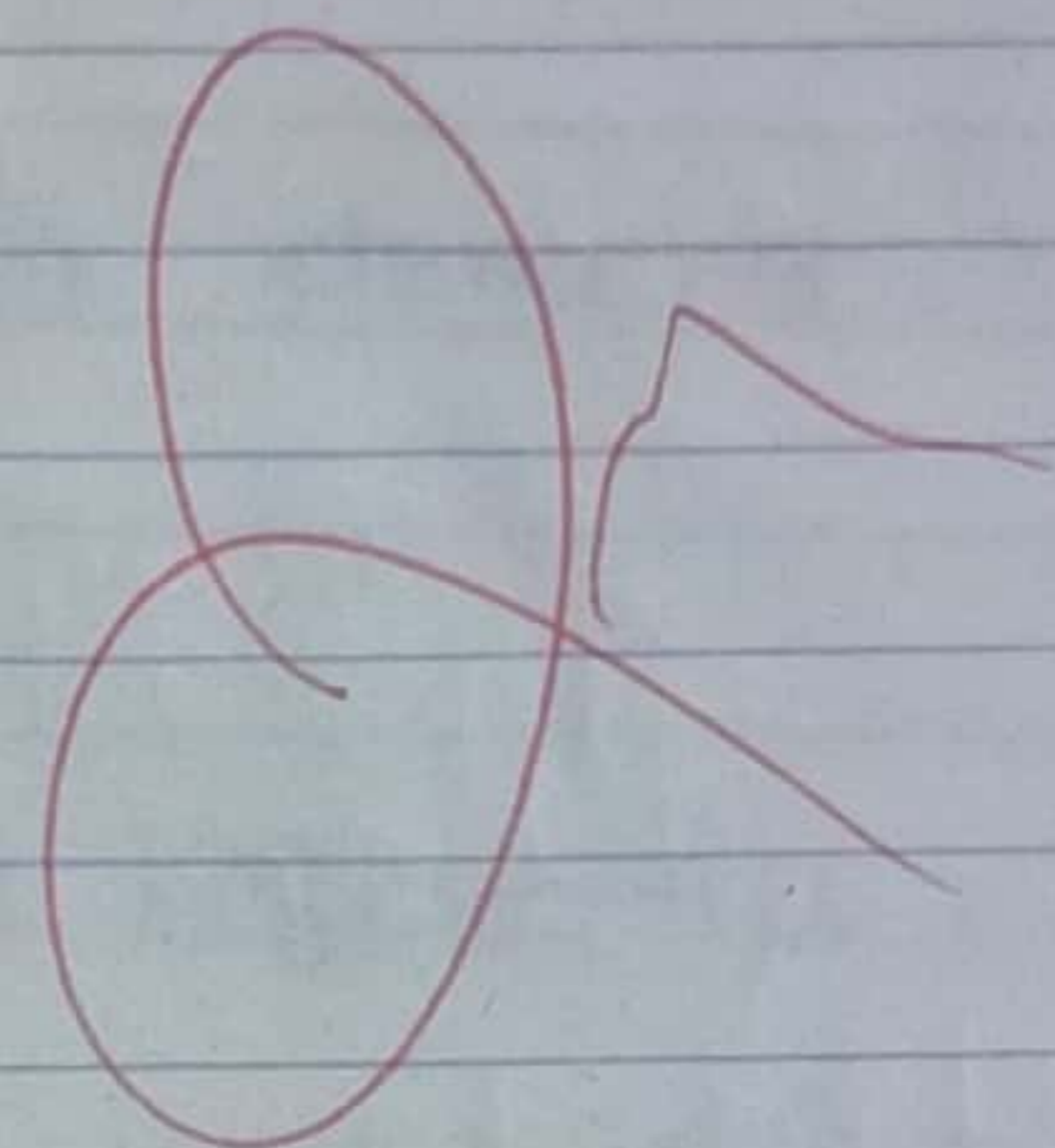
$$\lim_{x \rightarrow 2} \frac{4x + 2x}{3x + 2x} \textcircled{1}$$

$$x \rightarrow 2$$

$$\lim \frac{4(2) + 2(2)}{3(2) + 2(2)}$$

$$\lim \frac{8 + 4}{6 + 4}$$

$$\lim \frac{12}{10} = \boxed{6}$$



$$\lim F(x)^n \textcircled{2}$$

$$x \rightarrow d$$

$$\lim [2x]^3$$

$$\lim (2(2))^3 = \boxed{64}$$

$$\textcircled{3} \lim_{x \rightarrow a} \sqrt[n]{Fx}$$

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

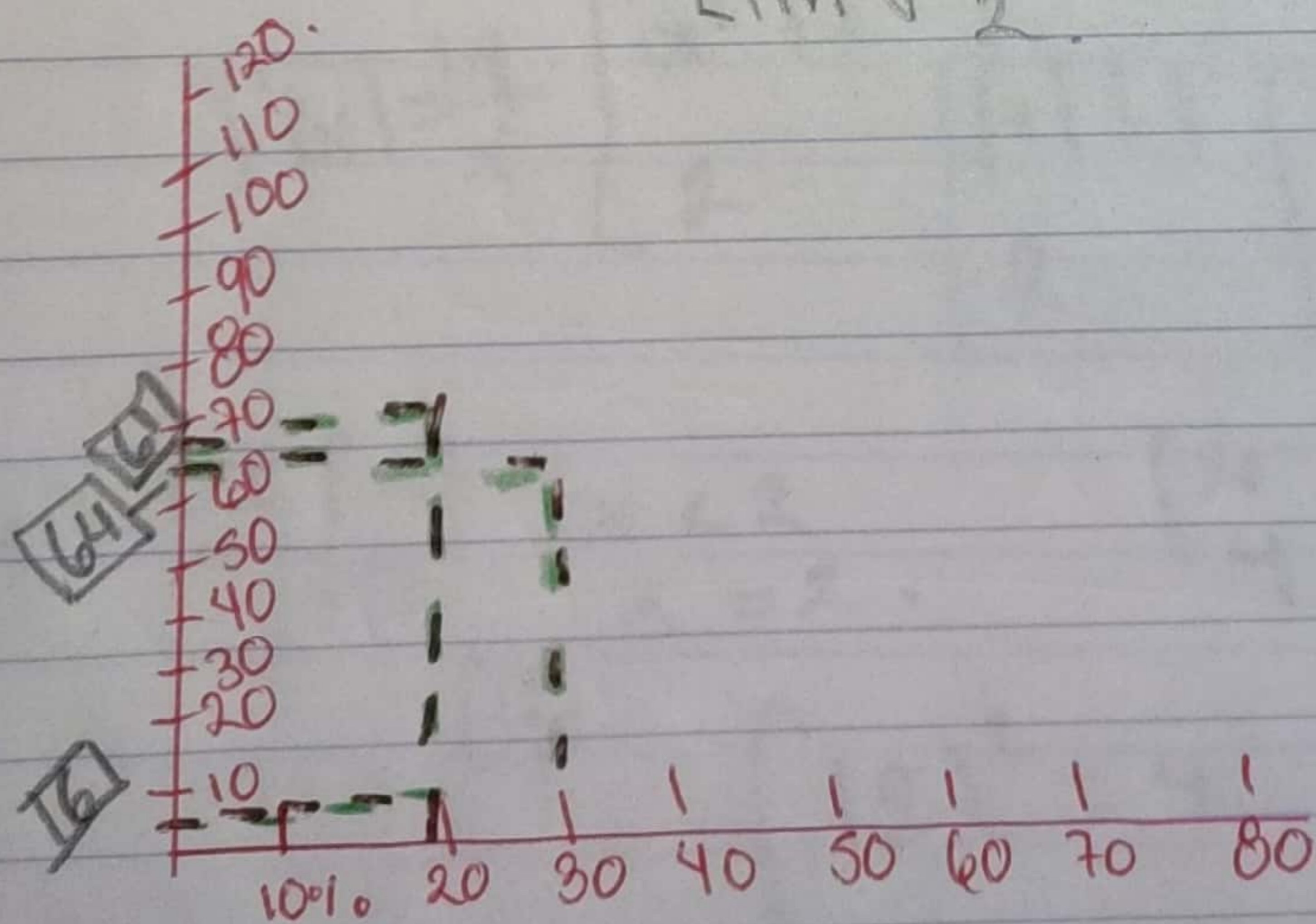
$$\lim \sqrt{2(2)}$$

$$\lim \sqrt{4}$$

$$\lim \sqrt{2}$$

$$\textcircled{4} \lim (80) (61) = 488$$

488	2
244	2
122	2
61	61
-	



Ejercicios en clase.

PH 6.1 dsato2 hb ?

Lim 80 (6.1) = 488. 6.1 - 100% 2 - 32.79%

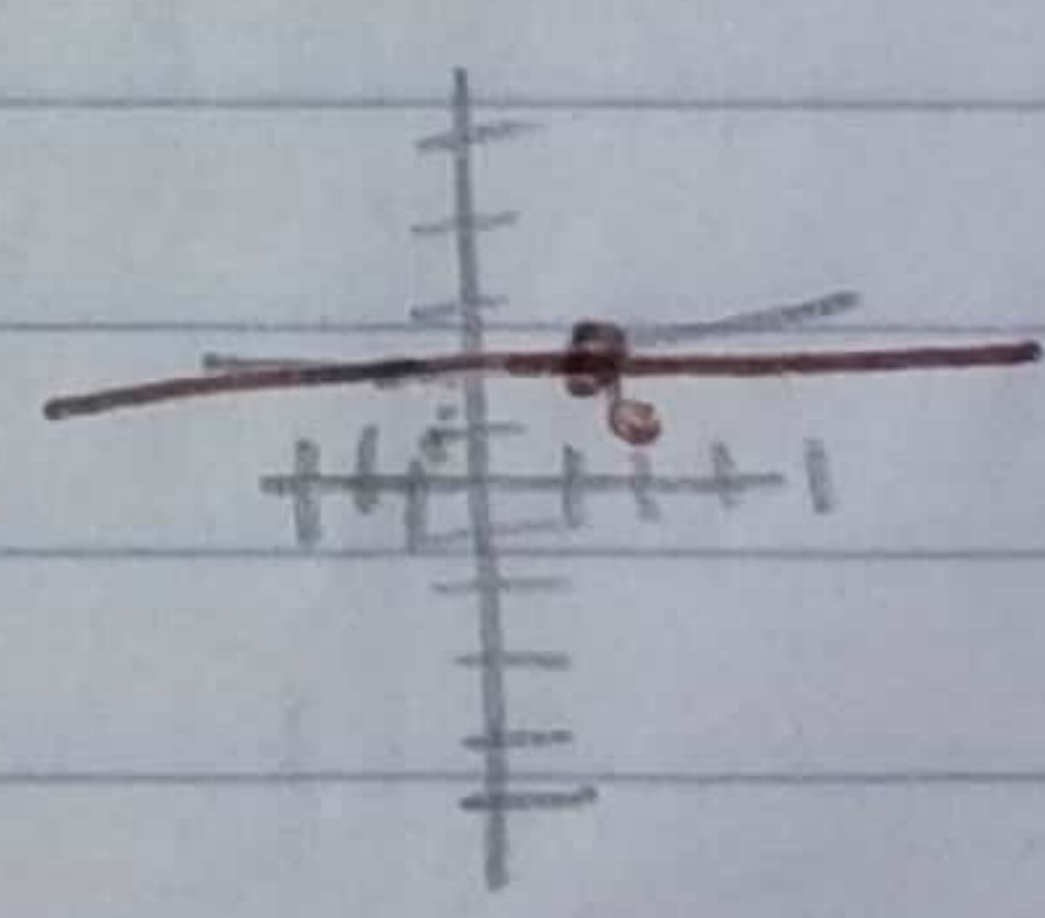
480		
240	2	cuando x se acerca a c para la derecha.
120	2	Lim f(x) Lim x
60	2	x → a ⁺ → 0 ⁺ x.
30	2	cuando x se acerca a c por la izquierda.
15	2	Lim f(x) Lim x

f(x) = $\begin{cases} x^2 + 1 \\ 2 \end{cases}$ x → a⁻ x → 0⁻ x

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

si x > 1 $\begin{cases} |x| + 1 \\ 2 \end{cases}$ $\begin{cases} -2 \\ 2 \end{cases}$

f(x) = $\frac{|x|}{x} \begin{cases} x^2 + 1 \\ 2 \end{cases}$ $\begin{cases} |x| + 1 \\ 2 \end{cases}$ $\begin{cases} 2 \\ 2 \end{cases}$



f(x) = $\frac{|x|}{x} \begin{cases} x^2 \\ 4 \end{cases}$ x < 2 $\begin{cases} 4 \\ 4 \end{cases}$

$\begin{cases} 4 \\ 4 \end{cases}$ $\begin{cases} (2)^2 = 4 \\ 4 \end{cases}$