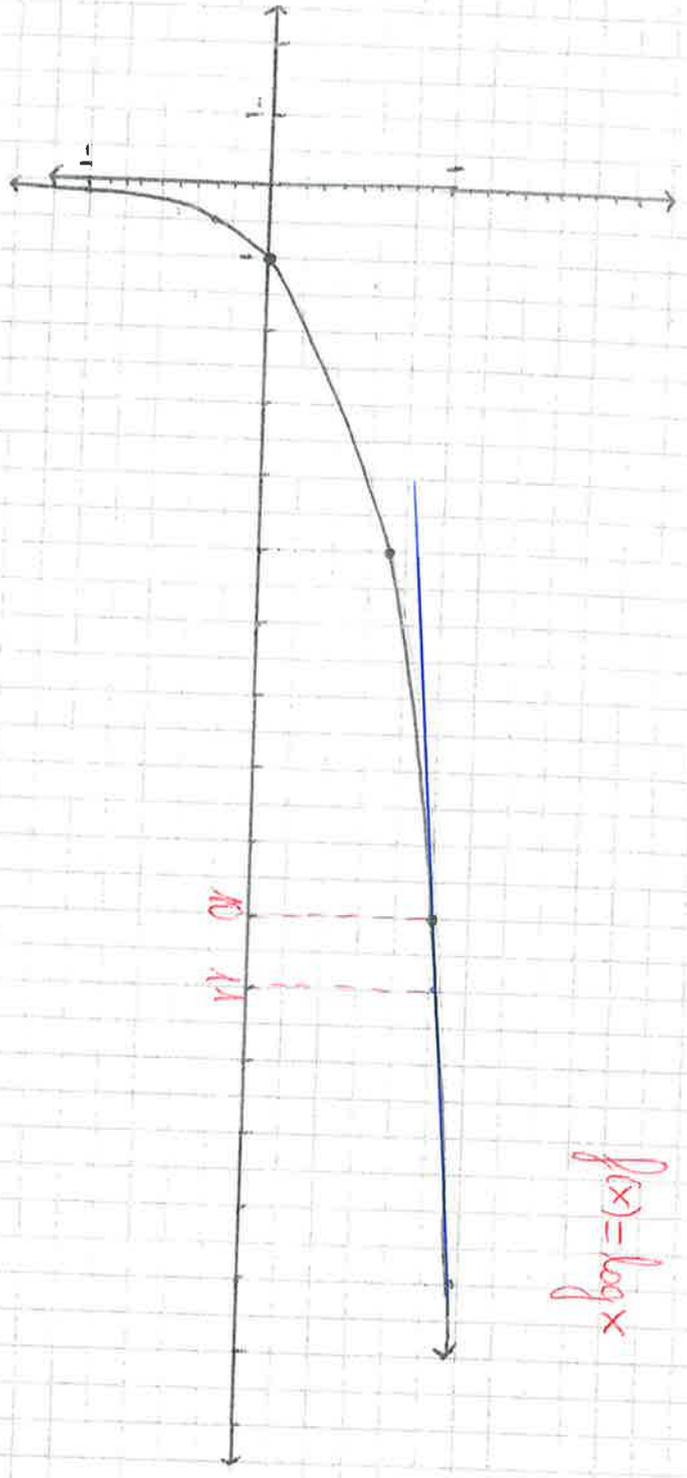


$$f(x) = \log x$$

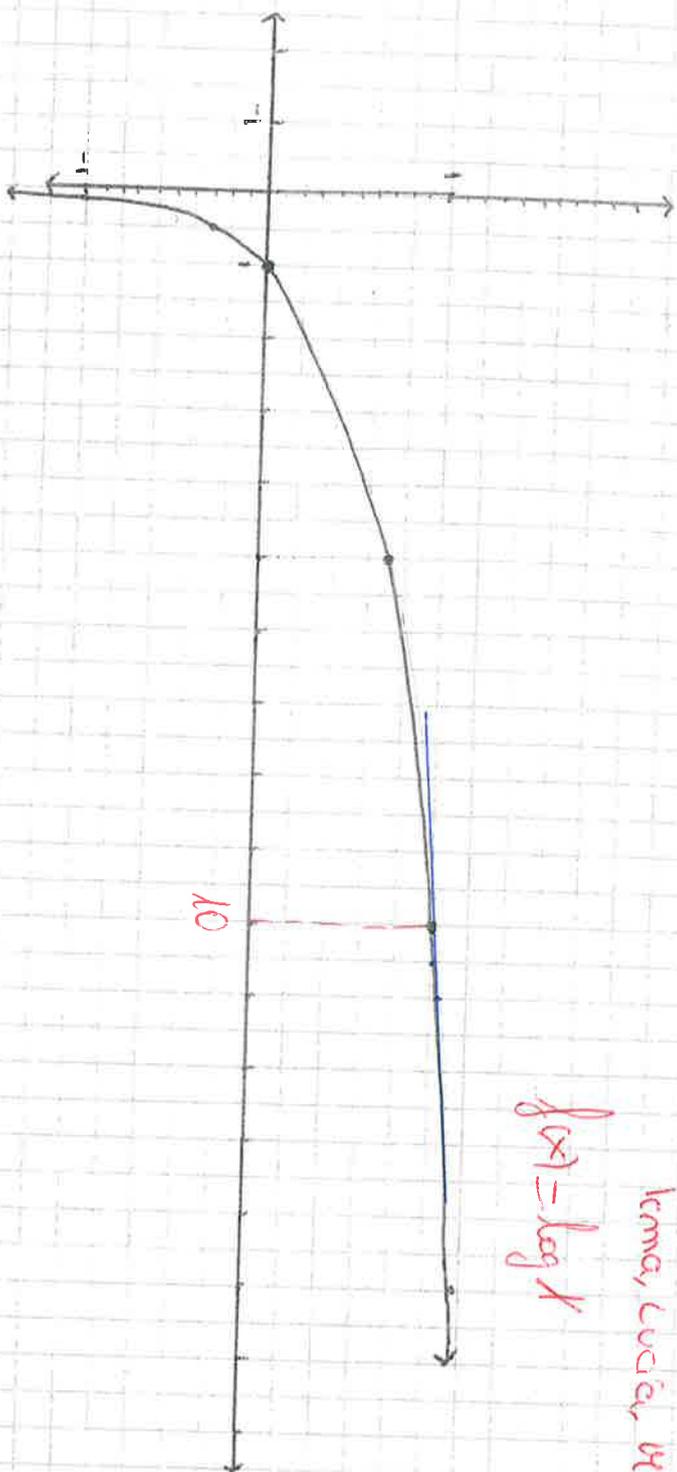


$$\text{TVM } [1, 2] = \frac{f(2) - f(1)}{2-1} = \frac{0,3 - 0}{1} = \frac{0,3}{1} = 0,3$$

$$\text{TVM } [10, 11] = \frac{f(11) - f(10)}{11-10} = \frac{0,04}{1} = 0,04$$

Imma, Lucia, Machina

$$f(x) = \log x$$

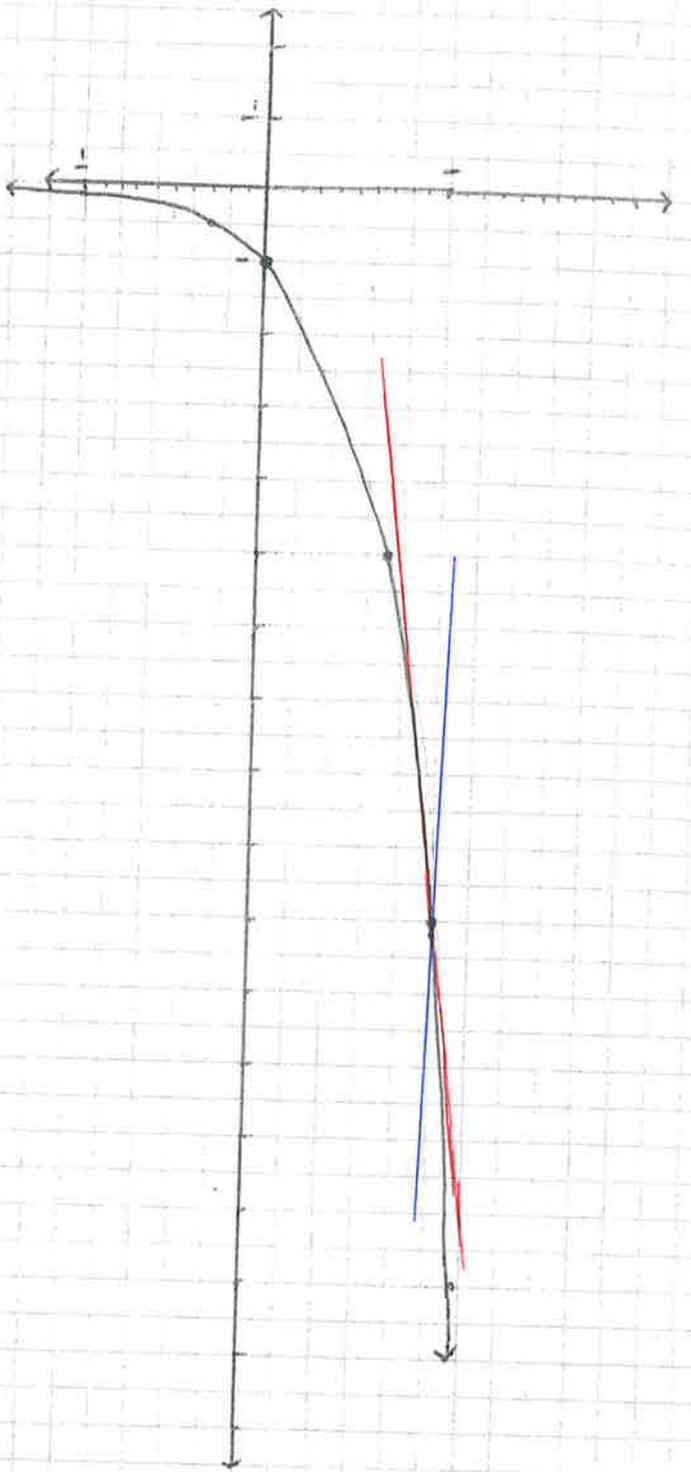


$$\begin{aligned} \text{TVM}[1, 2] &= \frac{f(2) - f(1)}{2 - 1} = \frac{0,3 - 0}{1} = \frac{0,3}{1} = 0,3 \\ \text{TVH}[10^5, 10^6] &= \frac{f(10^6) - f(10^5)}{10^6 - 10^5} = \frac{6,0212}{9,5} = 0,092 \end{aligned}$$



$$T_{(10, 2)} = \frac{f(x) - f(1)}{x - 1} = \frac{0,3 - 0}{10 - 1} = 0,3$$

$$T_{(10, 10, 1)} = \frac{f(10, 1) - f(10)}{0,1 - 10} = \frac{1,001 - 1}{0,1} = 0,01$$



$$TVM [1, 2] = \frac{f(2) - f(1)}{2 - 1} = \frac{0,3 - 0}{1} = \frac{0,3}{1} = 0,3$$

$$TVM [10, 10,01] = \frac{f(10,01) - f(10)}{10,01 - 10} = \frac{4,0004 - 4}{0,01} = 0,0434$$

Vega, Carla Pérez y Paula Padin

EXERCICIO 3.

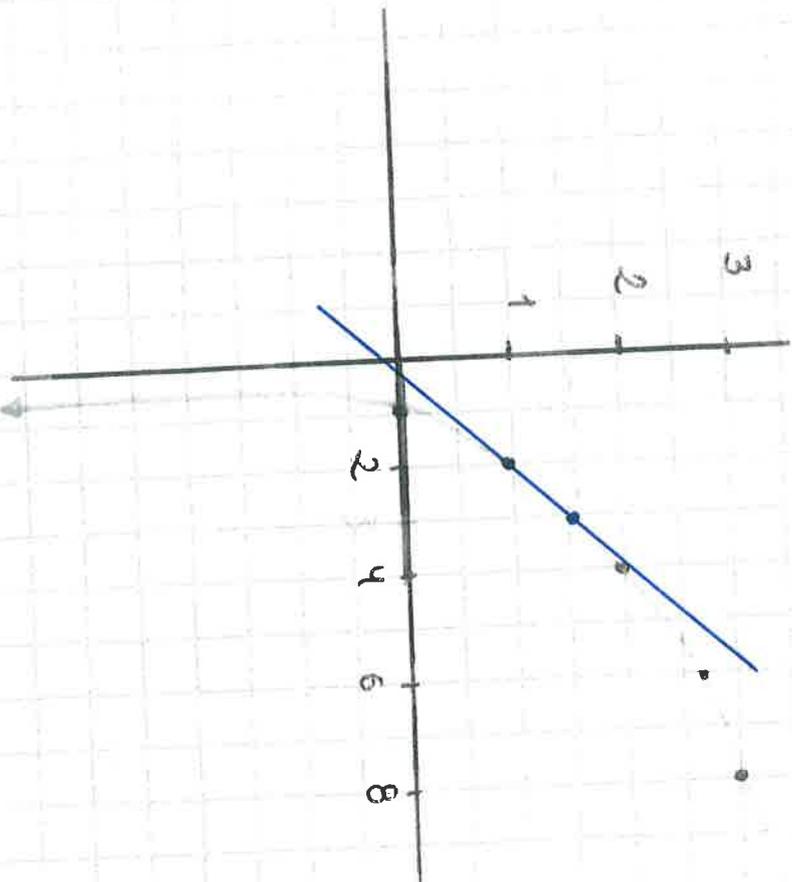
$$f(x) = \log_2 x$$

a)

$$f(x) = \log_2 x$$

x	y
2	$\log_2 2 = 1$
4	$\log_2 4 = \log_2 2^2 = 2$
6	$\log_2 6 = 2,6$
8	$\log_2 8 = \log_2 2^3 = 3$
1	$\log_2 1 = 0$

b)
 $f(2), f(2) = (2, 1)$



$$T.V.M [2,3] = \frac{f(3) - f(2)}{3 - 2} = \frac{1,58 - 1}{1} = 0,58$$

$$f(3) = \log_2 3 = 1,58$$

Vega, Carla Pérez y Paola Padin

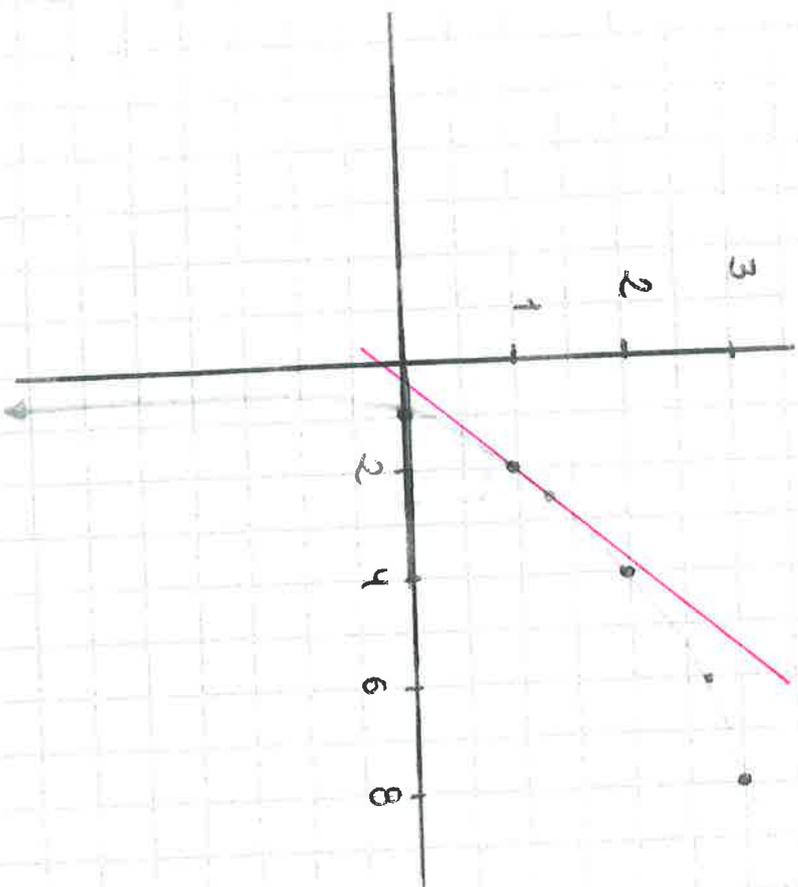
EXERCICIO 3.

$$f(x) = \log_2 x$$

a)

$$f(x) = \log_2 x$$

X	Y
2	$\log_2 2 = 1$
4	$\log_2 4 = \log_2 2^2 = 2$
6	$\log_2 6 = 2,6$
8	$\log_2 8 = \log_2 2^3 = 3$
1	$\log_2 1 = 0$



$$TVM_{[2;25]} = \frac{f(25) - f(2)}{2^5 - 2} = \frac{13,1}{2^5 - 2} = 0,6$$

$$f(25) = \log_2 25 = 1,3$$

b) $(2, f(2)) = (2, 1)$

Nega, Carla Pérez y Paula Padin

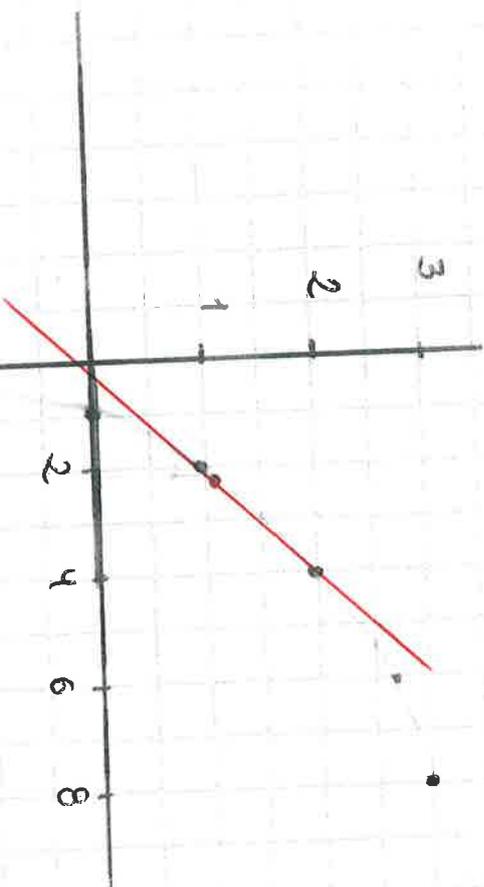
EXERCICIO 3.

$$f(x) = \log_2 x$$

a)

$$f(x) = \log_2 x$$

X	Y
2	$\log_2 2 = 1$
4	$\log_2 4 = \log_2 2^2 = 2$
6	$\log_2 6 = 2,6$
8	$\log_2 8 = \log_2 2^3 = 3$
1	$\log_2 1 = 0$



$$T.M.[2,2,1] = \frac{f(2) \cdot f(2)}{2 \cdot 2} = \frac{1 \cdot 1}{2} = 0,5$$

$$f(2,1) = \log_2 2^1 = 1 \cdot 1 = 1$$

b)
 $(2, f(2)) = (2, 1)$

Vega, Carla Pérez y Paula Padín

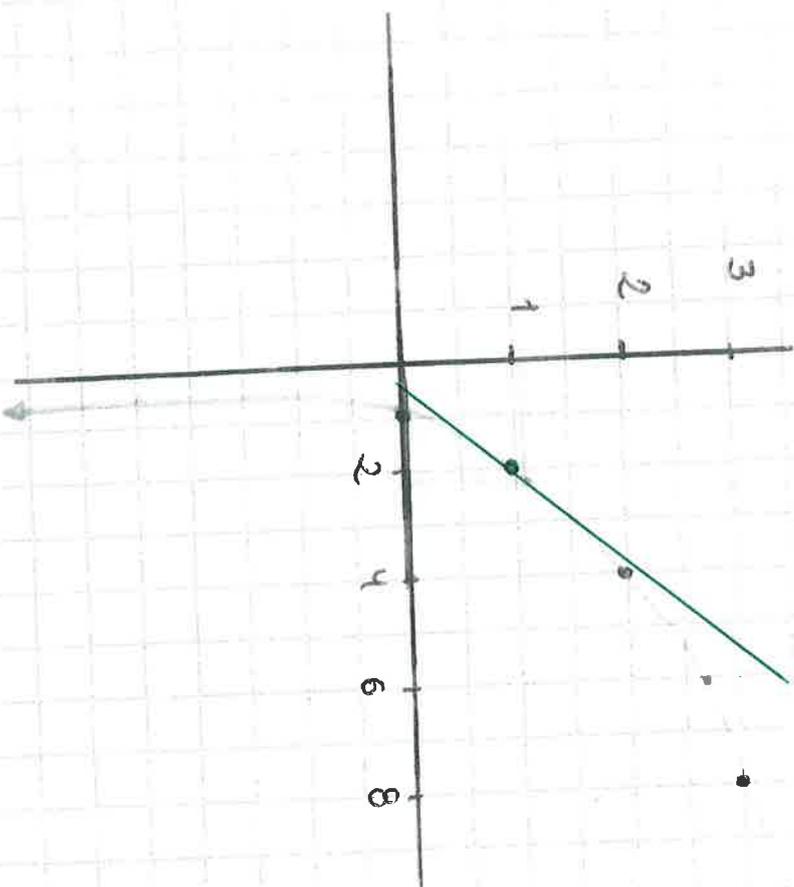
EXERCICIO 3.

$$f(x) = \log_2 x$$

a)

$$f(x) = \log_2 x$$

X	Y
2	$\log_2 2 = 1$
4	$\log_2 4 = \log_2 2^2 = 2$
6	$\log_2 6 = 2,6$
8	$\log_2 8 = \log_2 2^3 = 3$
1	$\log_2 1 = 0$



b)

$$f(2, f(2)) = (2, 1)$$

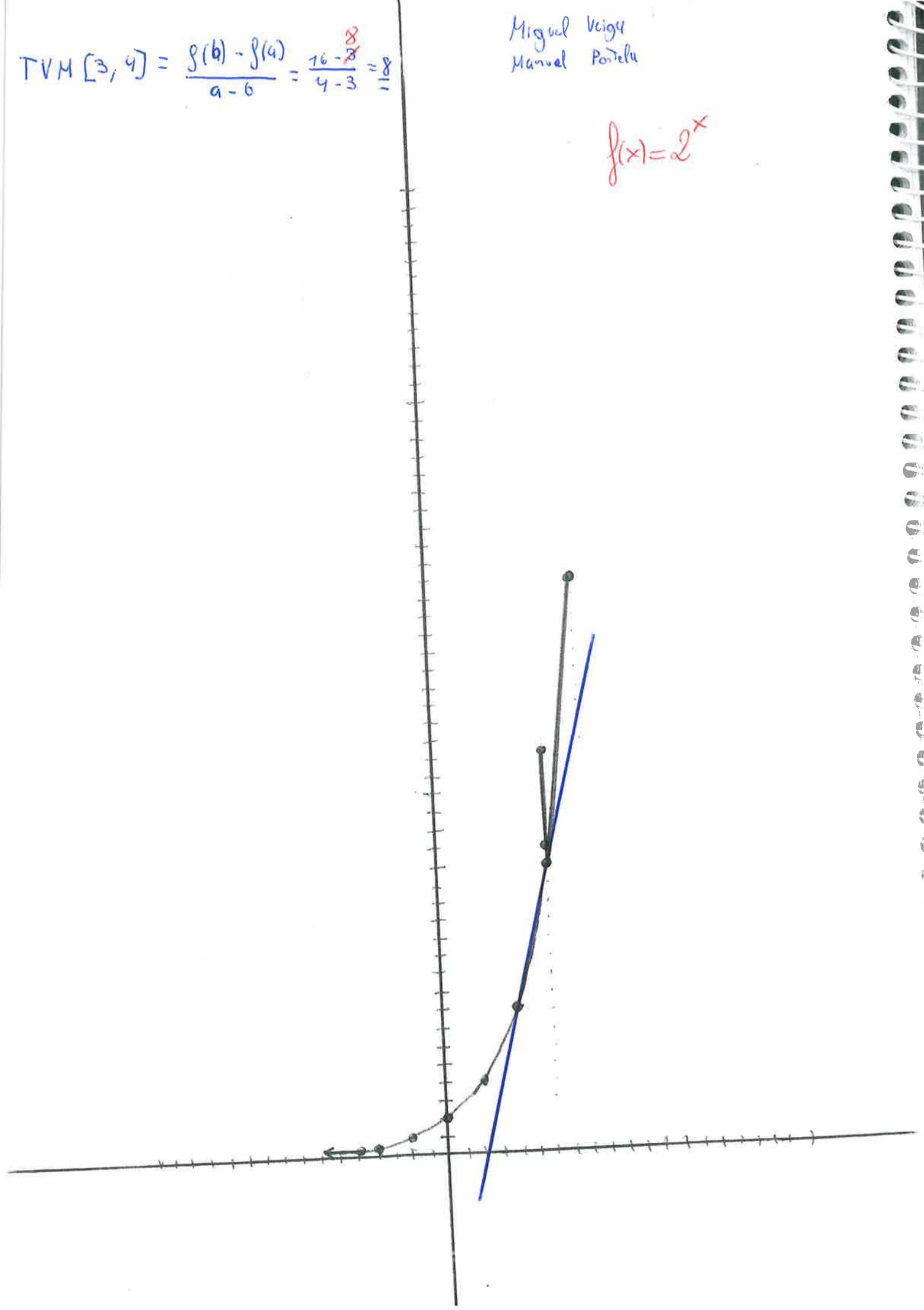
$$TVM_{[2, 2, 0, 1]} = \frac{f(2, 0, 1) - f(2)}{2 \cdot 0,1 - 2} = \frac{1,0072 - 1}{2 \cdot 0,1 - 2} = 0,72$$

$$f(2, 0, 1) = \log_2 2,01 = 1,0072$$

$$TVM [3, 4] = \frac{f(b) - f(a)}{a - b} = \frac{16 - \cancel{8}}{4 - 3} = 8$$

Miguel Veiga
Manuel Portela

$$f(x) = 2^x$$

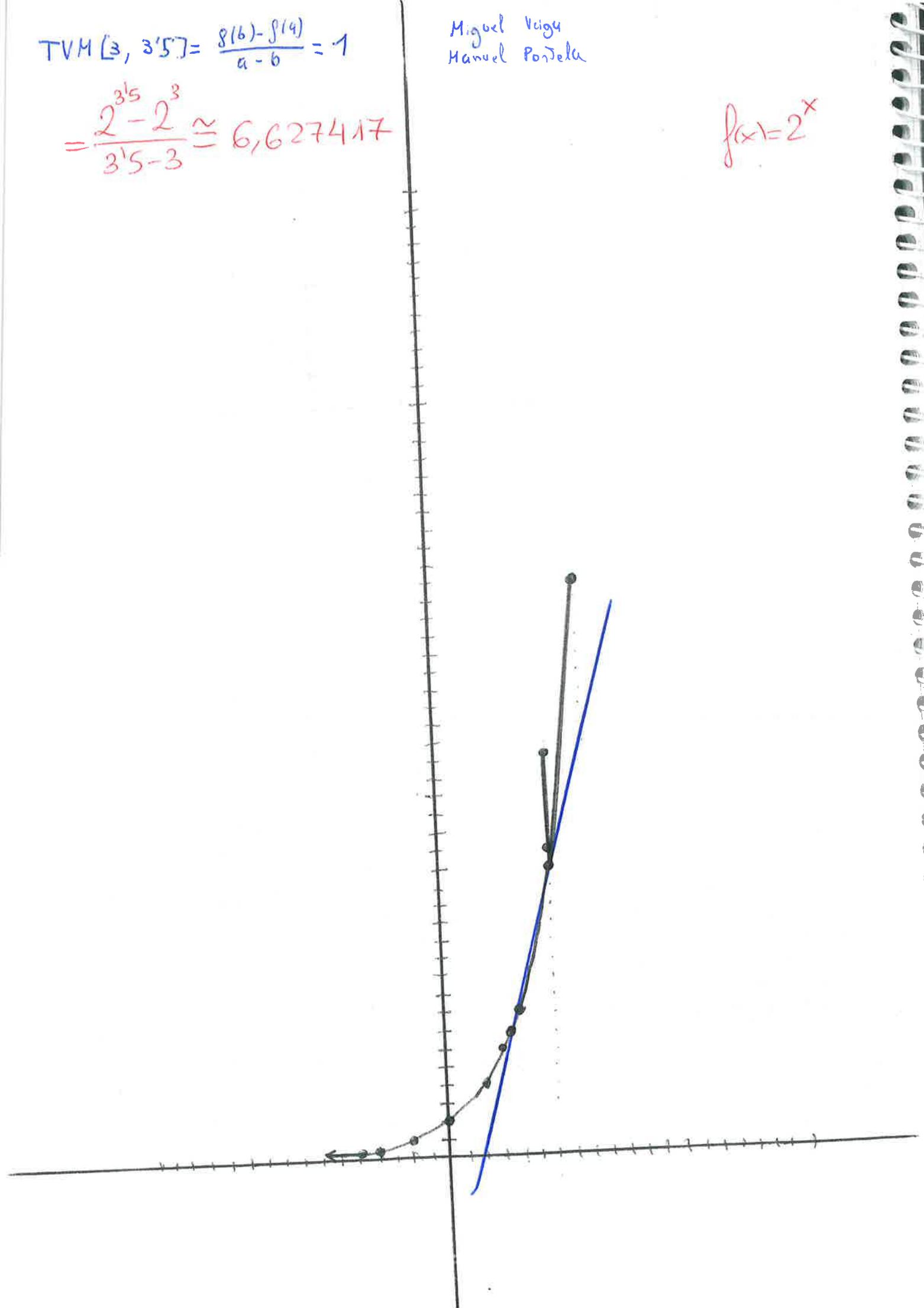


$$TVM [3, 3.5] = \frac{f(b) - f(a)}{a - b} = -1$$

$$= \frac{2^{3.5} - 2^3}{3.5 - 3} \approx 6,627417$$

Miguel Veiga
Manuel Portela

$$f(x) = 2^x$$

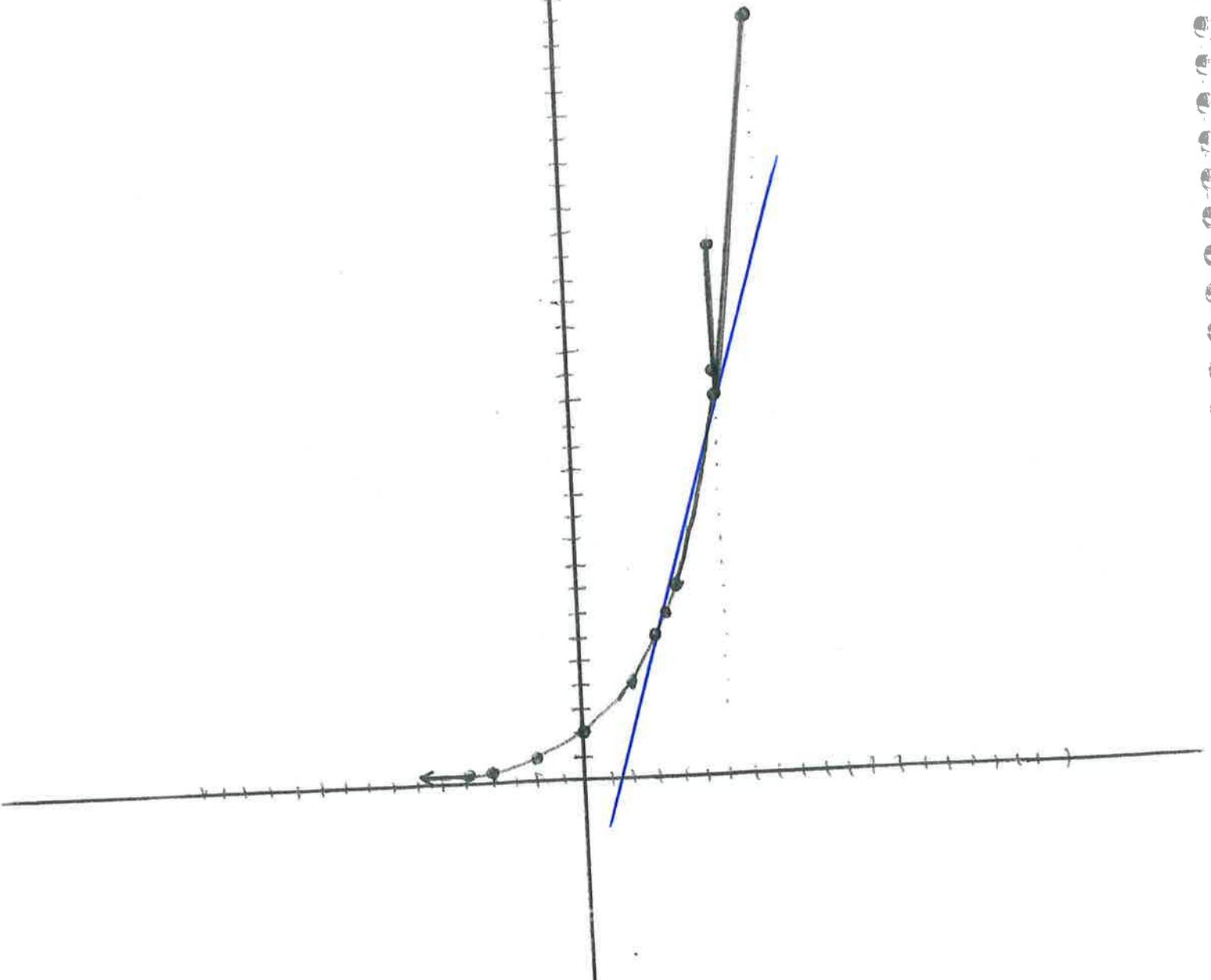


$$TVM[3, 3,1] = \frac{f(b) - f(a)}{a - b} = 1$$

$$= \frac{2^{3,1} - 2^3}{3,1 - 3} = 5,741877\dots$$

Miguel Veigu
Manuel Pontón

$$f(x) = 2^x$$

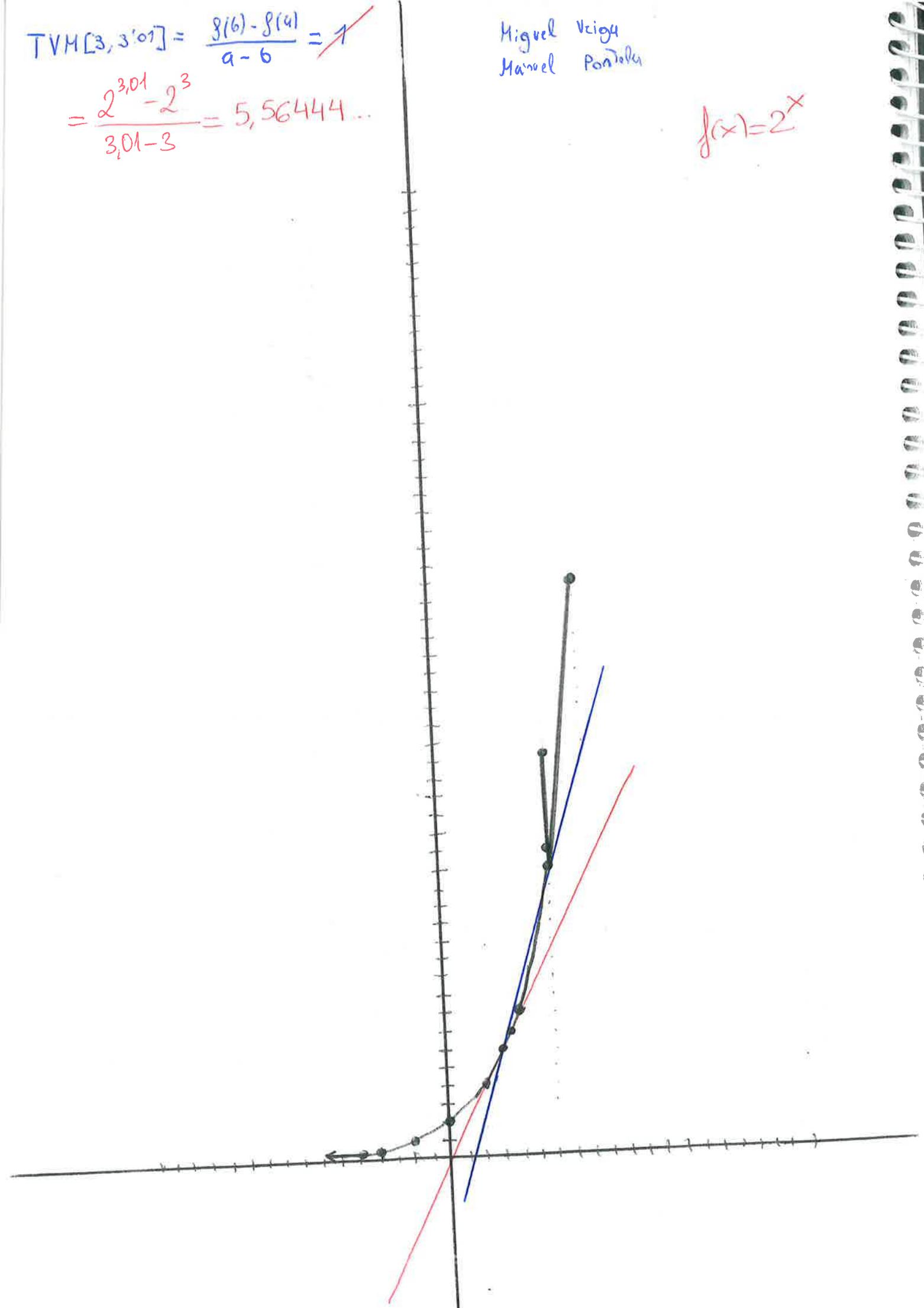


$$TVM[3, 3,01] = \frac{f(b) - f(a)}{a - b} = 7$$

$$= \frac{2^{3,01} - 2^3}{3,01 - 3} = 5,56444\dots$$

Miguel Veiga
Manuel Pontes

$$f(x) = 2^x$$



Función Polinómica

$$f(x) = x^3$$

$$a = 1 > 0 \rightarrow a > 0$$

$$n = 3 \rightarrow \text{impar}$$

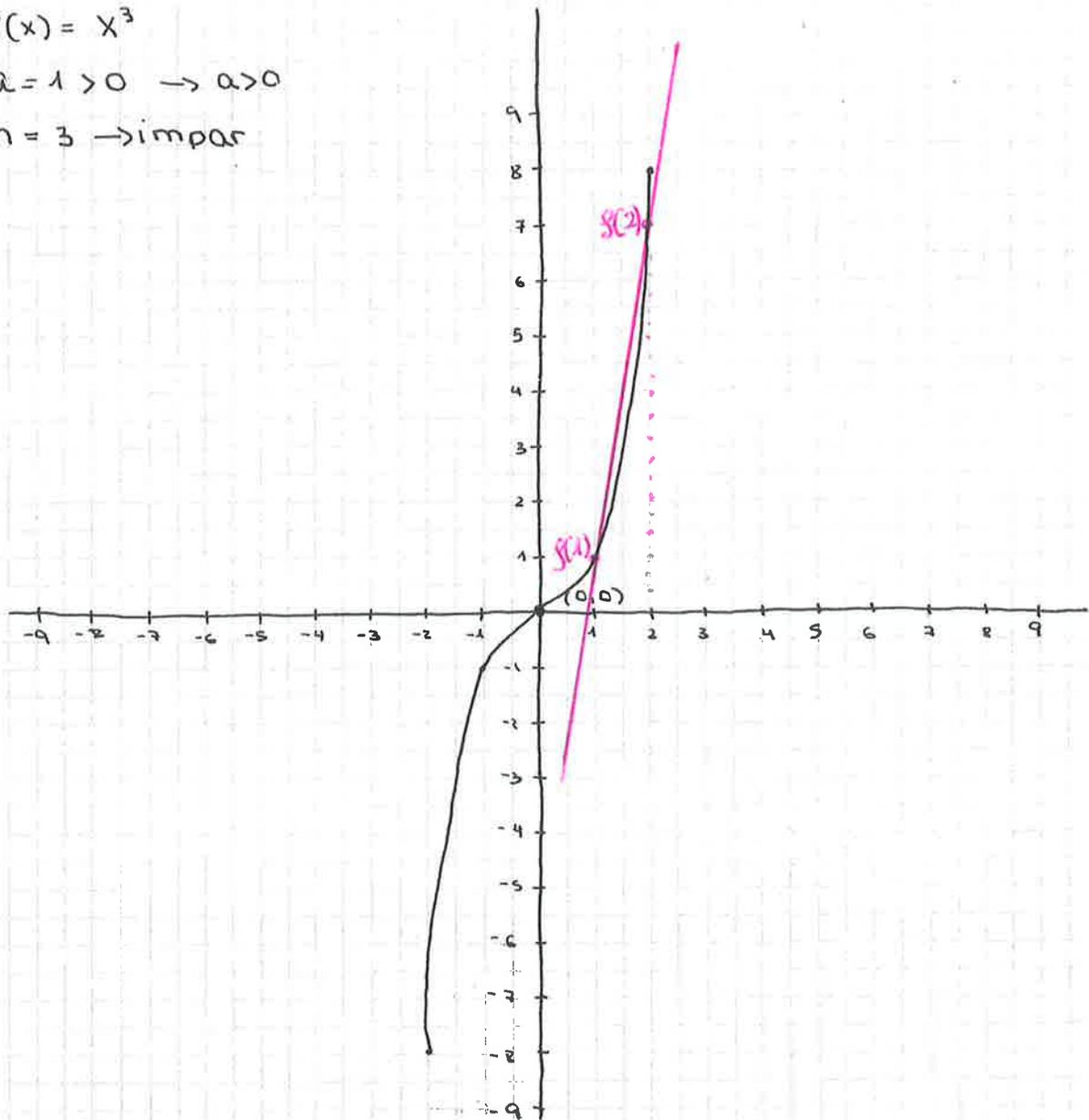


TABLA DE VALORES

x	y
1	1
-1	-1
2	8
-2	-8

$$TVM[1,2] = \frac{f(2) - f(1)}{2 - 1} = \frac{8 - 1}{1} = 7$$

Función Polinómica

$$f(x) = x^3$$

$$a = 1 > 0 \rightarrow a > 0$$

$$n = 3 \rightarrow \text{impar}$$

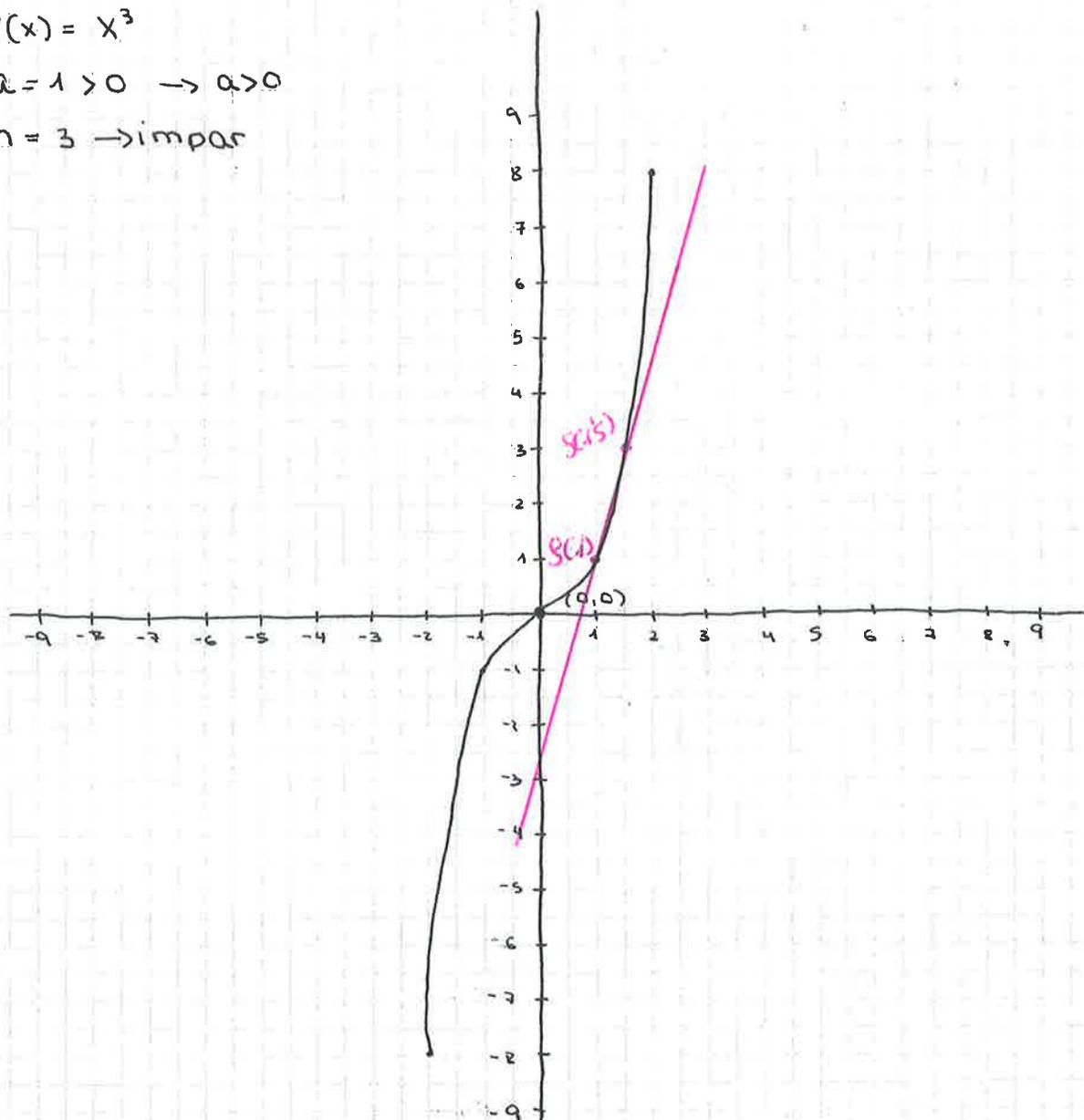


TABLA DE VALORES

x	y
1	1
-1	-1
2	8
-2	-8

$$TVM[1, 1.5] = \frac{f(1.5) - f(1)}{1.5 - 1} = 4.75$$

Función Polinómica

$$f(x) = x^3$$

$$a = 1 > 0 \rightarrow a > 0$$

$$n = 3 \rightarrow \text{impar}$$

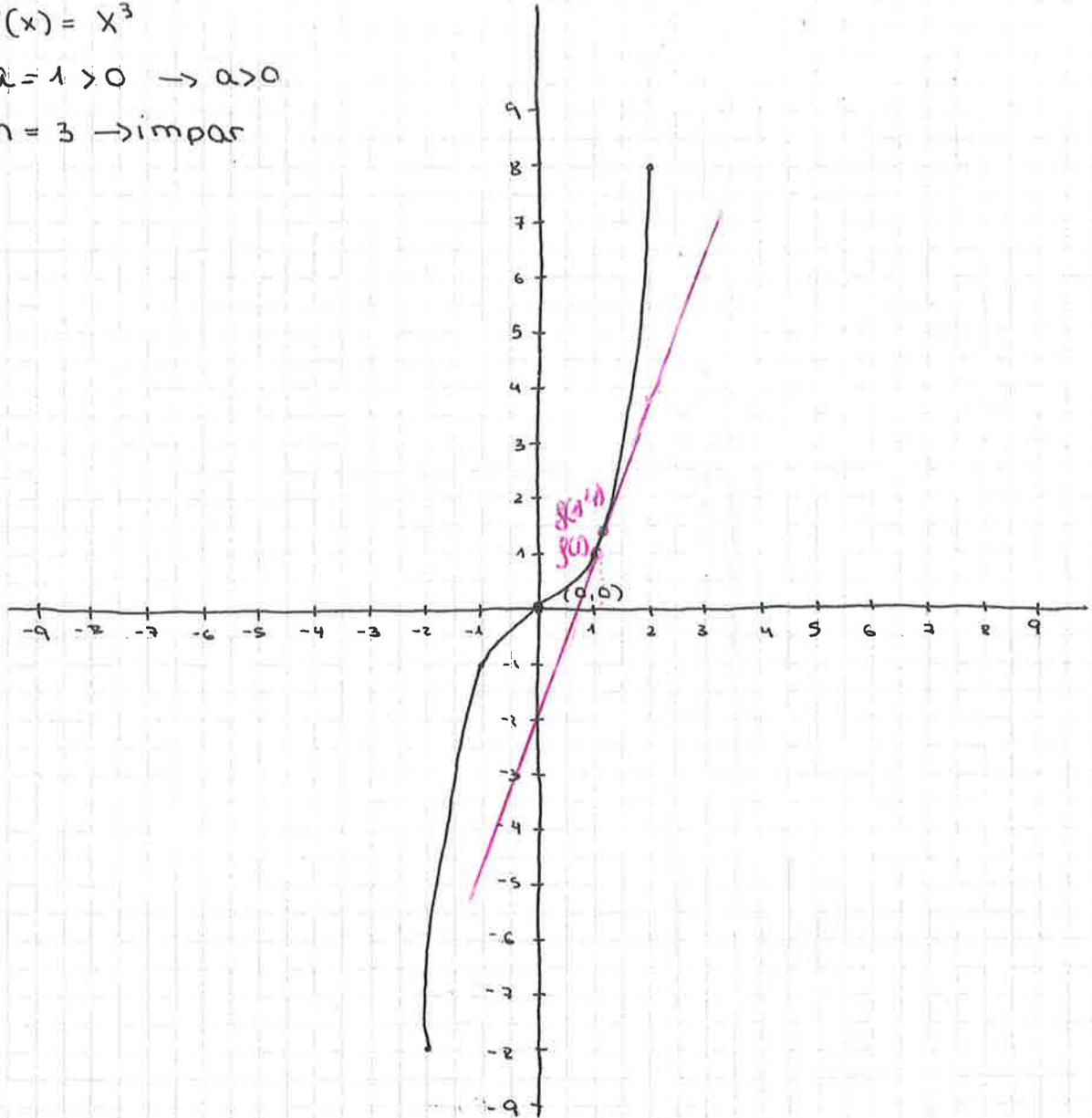


TABLA DE VALORES

x	y
1	1
-1	-1
2	8
-2	-8

$$T.V.M. [1,1] = \frac{f(1,1) - f(1)}{1,1 - 1} = 3,31$$

Función Polinómica

$$f(x) = x^3$$

$$a = 1 > 0 \rightarrow a > 0$$

$$n = 3 \rightarrow \text{impar}$$

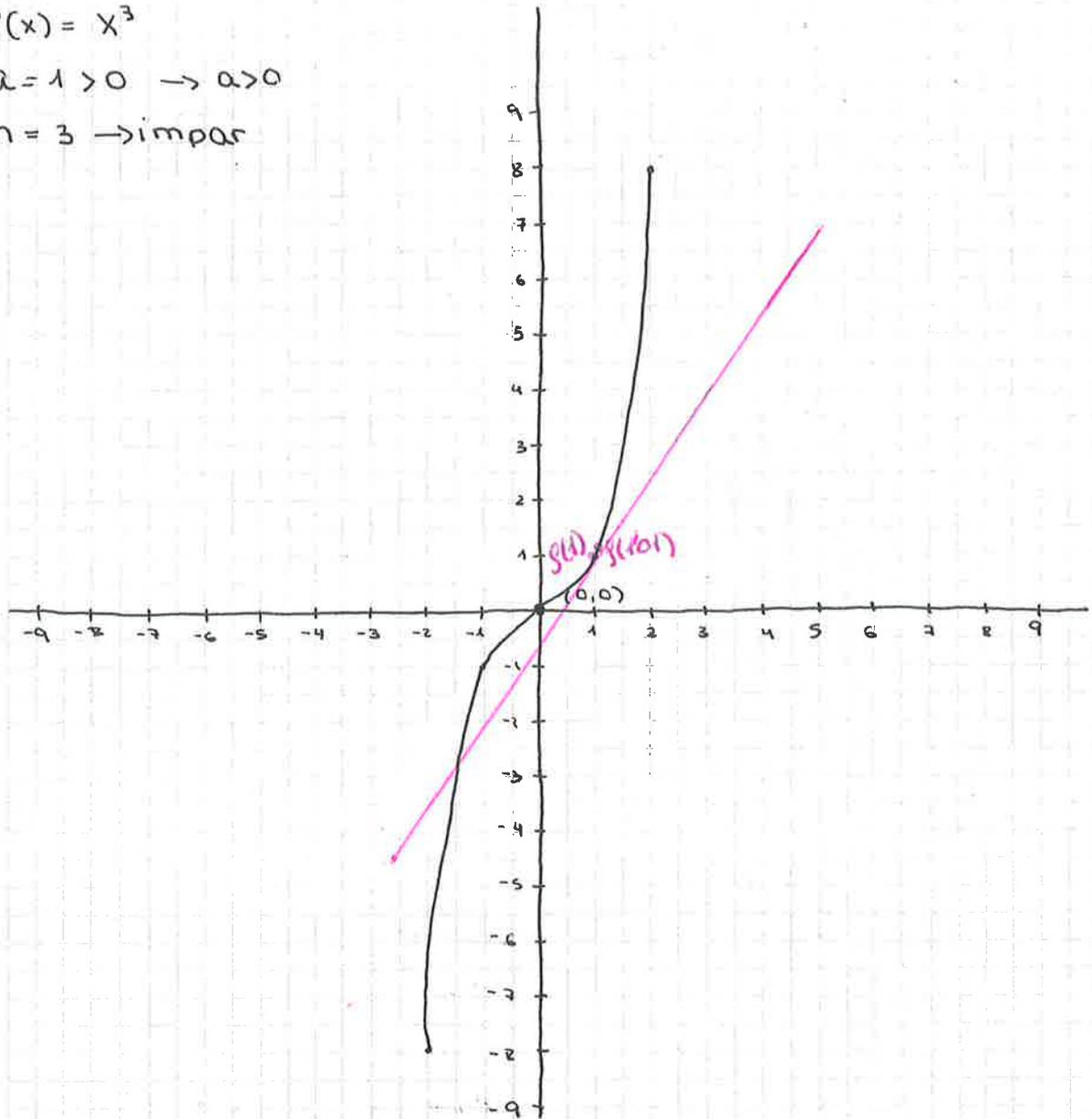


TABLA DE VALORES

x	y
1	1
-1	-1
2	8
-2	-8

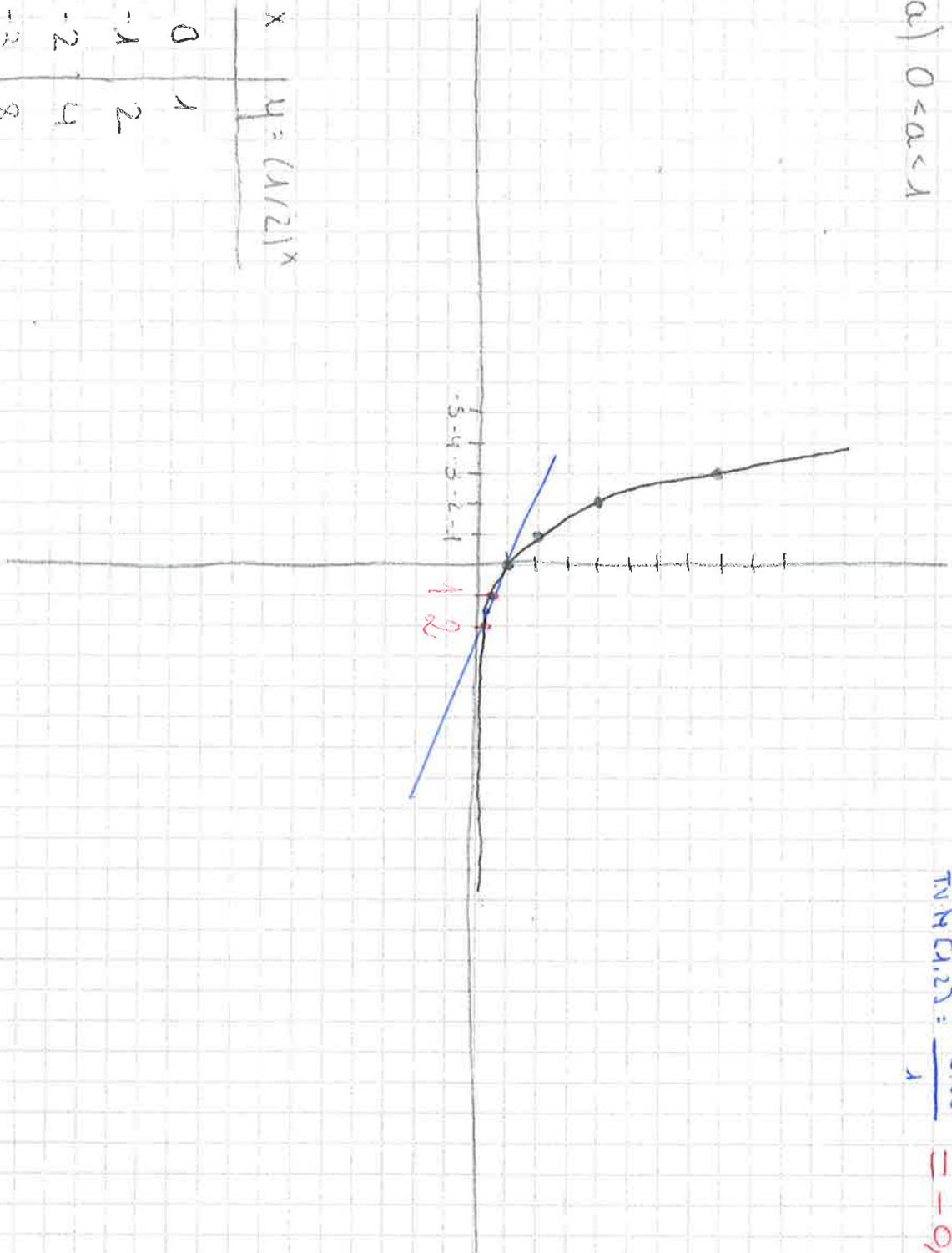
T.V.M
[1; 2]

$$\frac{f(2) - f(1)}{2 - 1} = 3,03$$

$$f(x) = (1/2)^x$$

a) $0 < a < 1$

$$TN(1,2) = \frac{-0,25}{1} = -0,25$$



x	$y = (1/2)^x$
---	---------------

0	1
-1	2
-2	4
-3	8

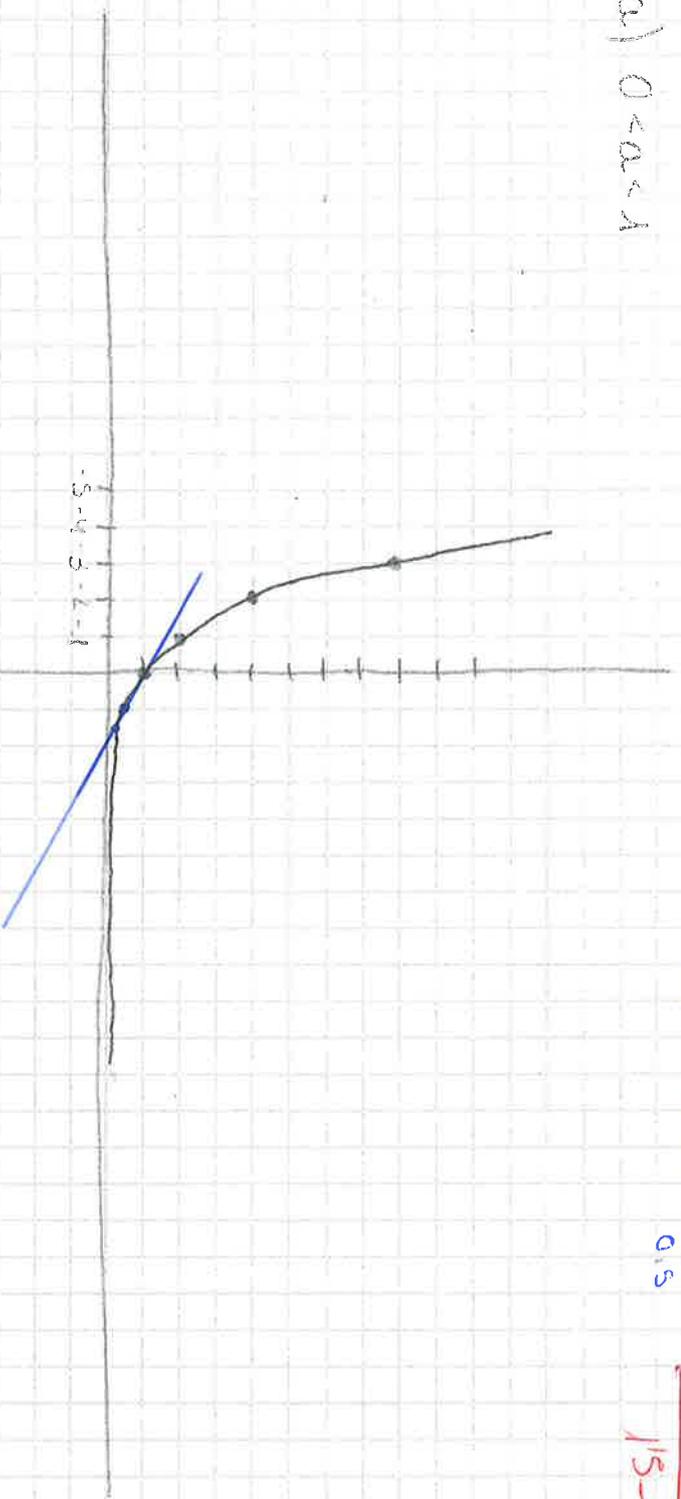
b) $(1, f(1))$

$$f(x) = (1/2)^x$$

a) $0 < a < 1$

$$T.V.H.C.(1,1.5) = \frac{-0.15}{0.5}$$

$$= \frac{(1/2)^{1.5} - (1/2)^1}{1.5 - 1} = -0.292893...$$



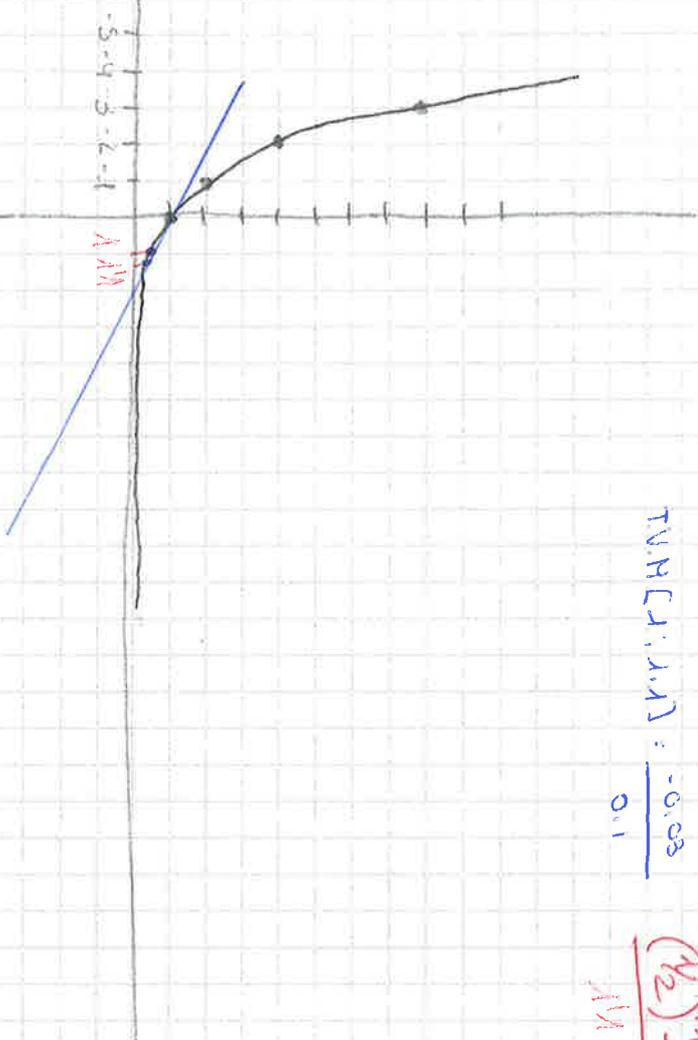
$$y = (1/2)^x$$

x	0	1
y	1	1/2

b) $(1, f(1))$

$$f(x) = (1/2)^x$$

$$a) 0 < a < 1$$



$$T.M.H[1, 1, 1] = \frac{-0,03}{0,1}$$

$$\frac{(1/2)^{1+h} - (1/2)^1}{h-1} = -0,334835 \dots$$

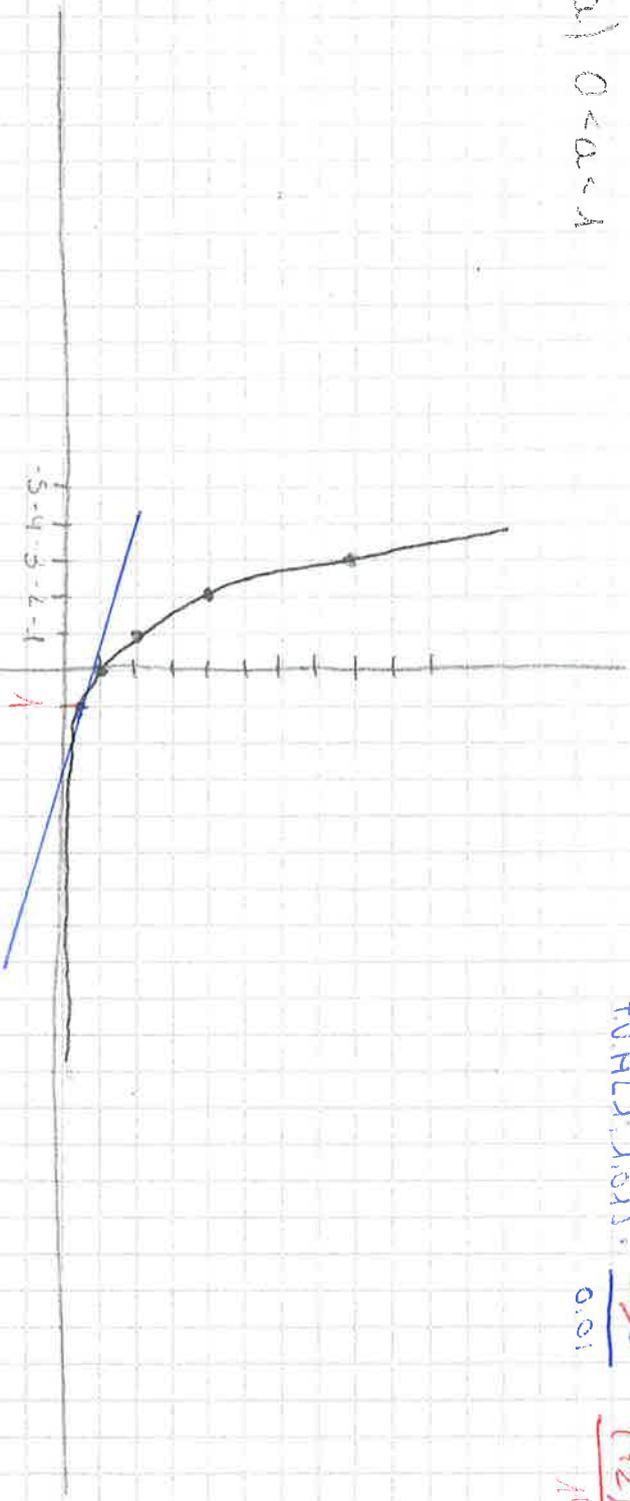
$$x \quad y = (1/2)^x$$

0	1
-1	2
-2	4
-3	8

$$b) (1, f'(1))$$

$$f(x) = (1/2)^x$$

a) $0 < a < 1$



$$y = (1/2)^x$$

x	y
0	1
-1	2
-2	4
-3	8

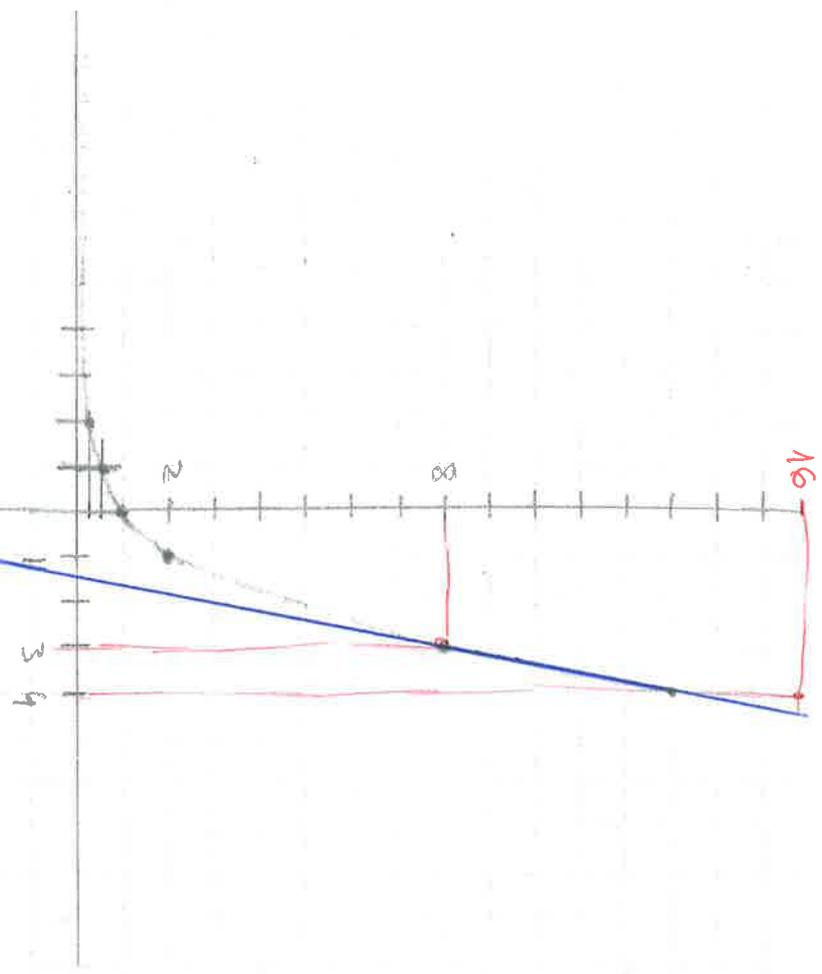
b) $(1, f(1))$

TANGENTE: $(1, 0,5)$

$$\frac{-0,0034 - \frac{-0,0034}{0,01} \cdot (1/2)^{1,01}}{1,01 - 1} = -0,345375...$$

aj)

$$f(x) = 2^x$$



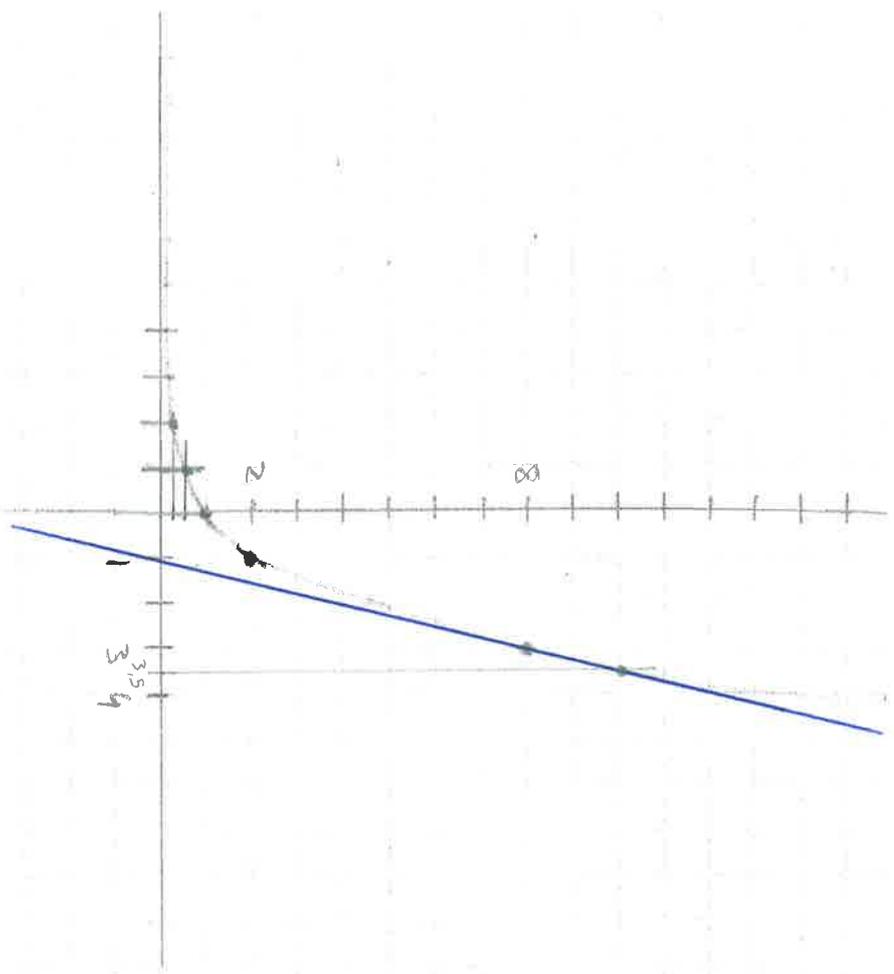
$$c) TVM = \frac{f(4) - f(3)}{4-3} = \frac{16-8}{1} = 8/1$$

$$d) TVM = \frac{f(3.5) - f(3)}{3.5-3} =$$

$$TVM =$$

Concerto Amadeo Anra
 Olga Sánchez Romar
 Lira Yin Varela Cartelle

$$f(x) = 2^x$$

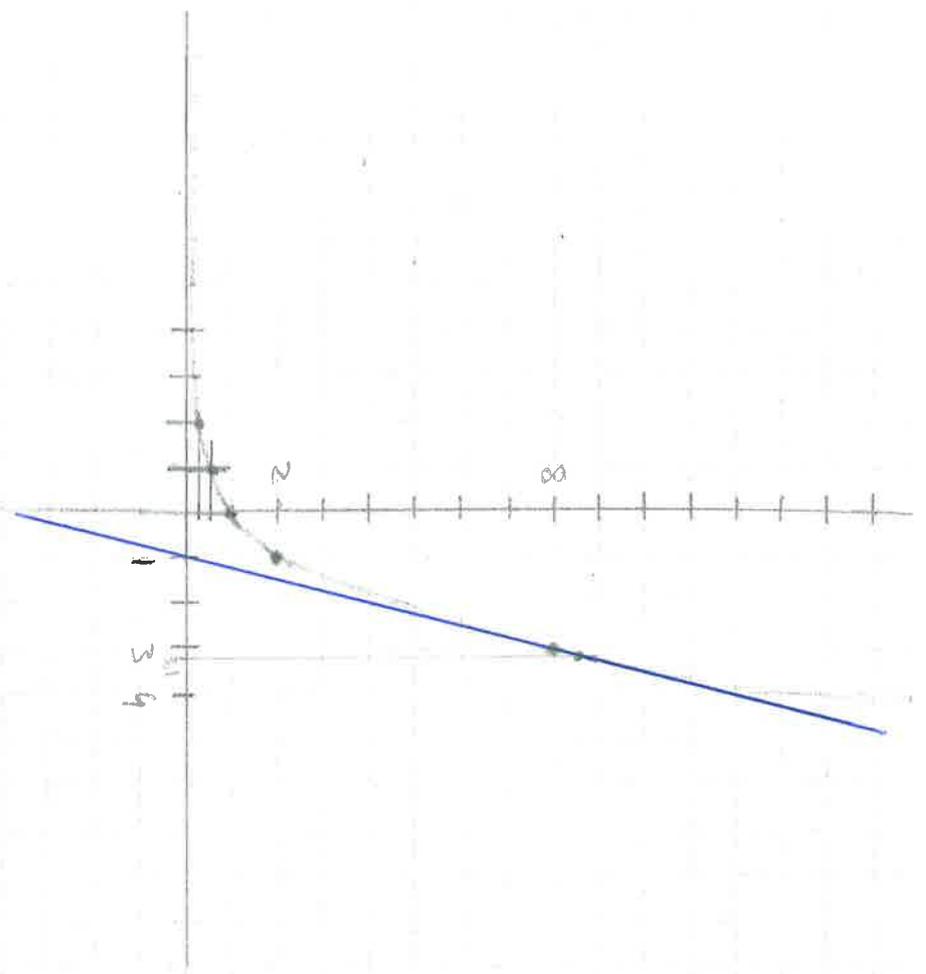


$$c) TVM = \frac{f(4) - f(3)}{4-3} = \frac{16-8}{1} = 8$$

$$d) TVM = \frac{f(3.5) - f(3)}{3.5-3} = \frac{2^{3.5} - 2^3}{0.5} \approx 6,627417$$

$$TVM = \underline{\hspace{2cm}}$$

$$f(x) = 2^x$$



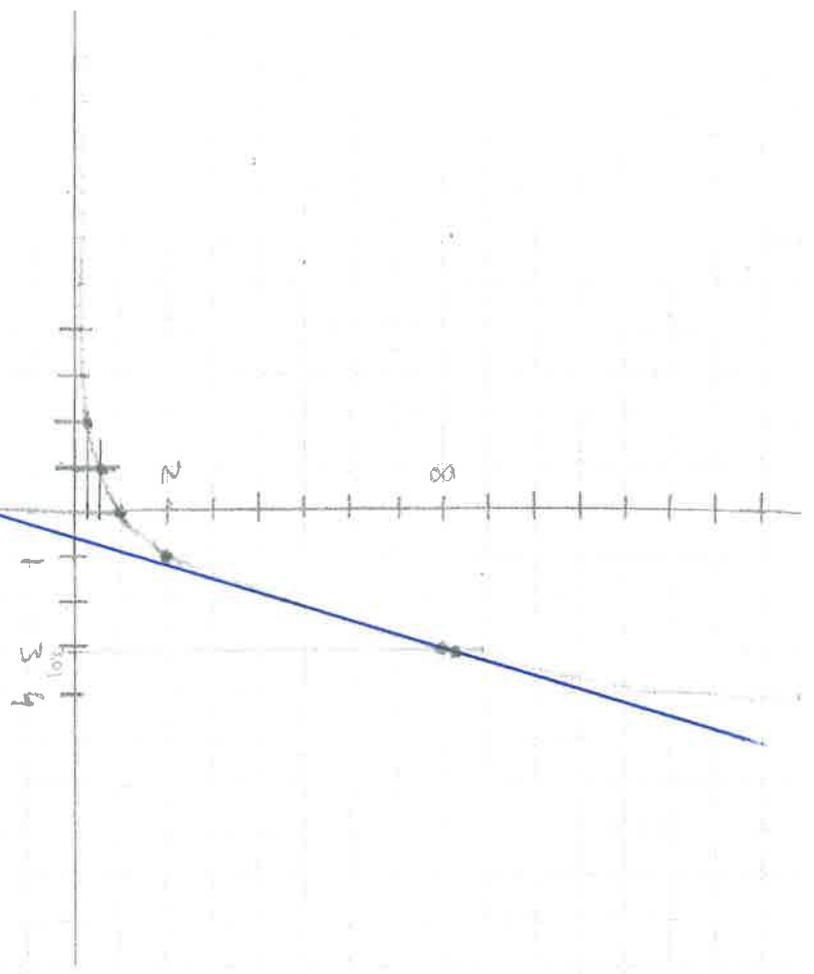
$$c) \text{ TVM} = \frac{f(4) - f(3)}{4 - 3} = \frac{16 - 8}{1} = 8/1$$

$$d) \text{ TVM} = \frac{f(3.1) - f(3)}{3.1 - 3} = \frac{2^{3.1} - 2^3}{0.1} \approx 57.41877$$

$$\text{TVM} = \underline{\hspace{2cm}}$$

aj

$$f(x) = 2^x$$



$$c) TVM = \frac{f(4) - f(3)}{4-3} = \frac{16-8}{1} = 8/1$$

$$d) TVM = \frac{f(3.01) - f(3)}{3.01-3} = \frac{2^{3.01} - 2^3}{3.01-3} \approx 5,56444$$

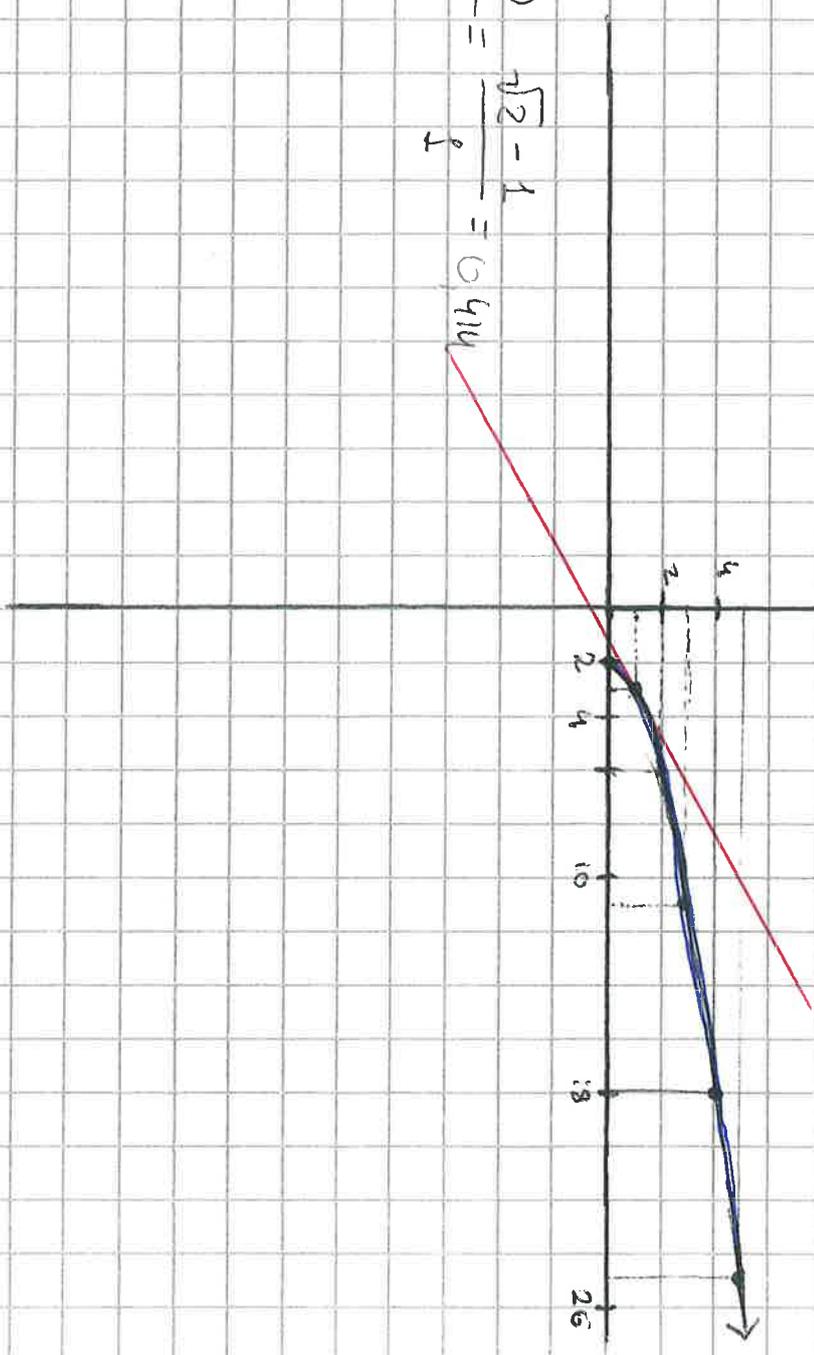
$$TVM = \underline{\hspace{2cm}}$$

$$4 - f(x) = \sqrt{x-2}$$

$$a) \quad x \cdot y = \sqrt{x-2}$$

3	6	11	18	27	2
1	2	3	4	5	0

$$T.M. = \frac{f(4) - f(3)}{4 - 3} = \frac{\sqrt{2} - 1}{1} = 0,414$$



b)

$$4 - f(x) = \sqrt{x-2}$$

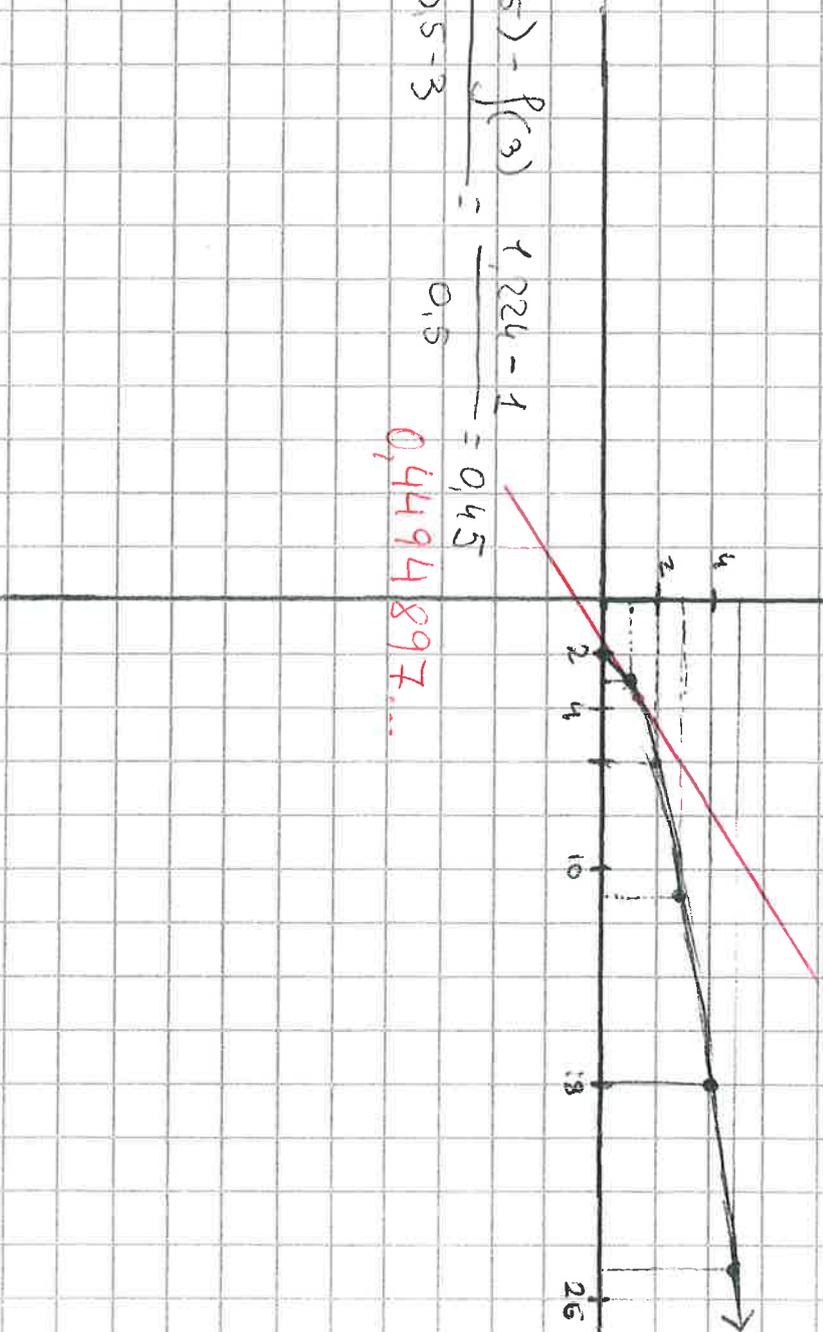
5)

x	y = $\sqrt{x-2}$
3	1
6	2
11	3
18	4
27	5
32	6

$$TUM [3, 3.5]$$

$$= \frac{f(3.5) - f(3)}{3.5 - 3} = \frac{1.224 - 1}{0.5} = 0.45$$

0,4494897...



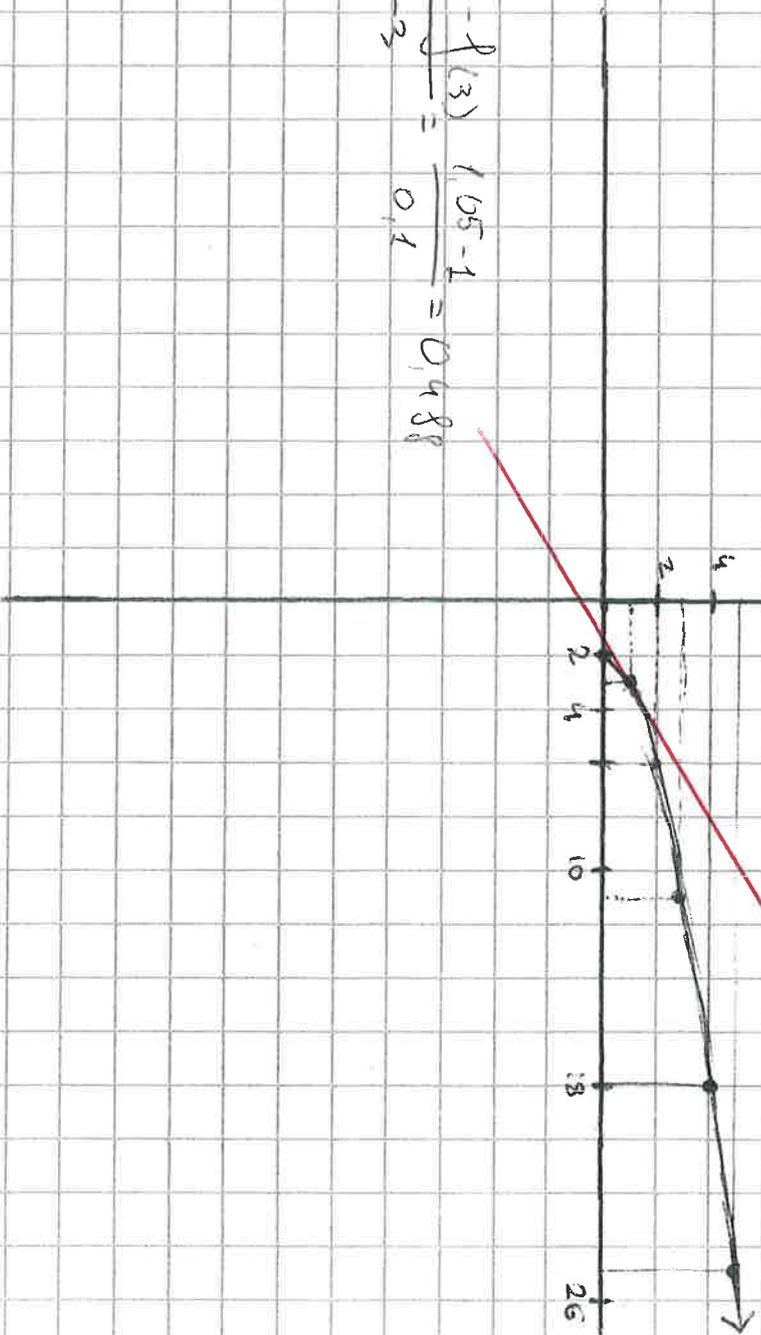
6)

$$4 - f(x) = \sqrt{x-2}$$

3)

x	y = $\sqrt{x-2}$
3	1
6	2
11	3
18	4
27	5
32	6

$$T.V.M [3, 3.1] = \frac{f(3.1) - f(3)}{3.1 - 3} = \frac{f(3.1) - 1}{0.1} = 0.488$$

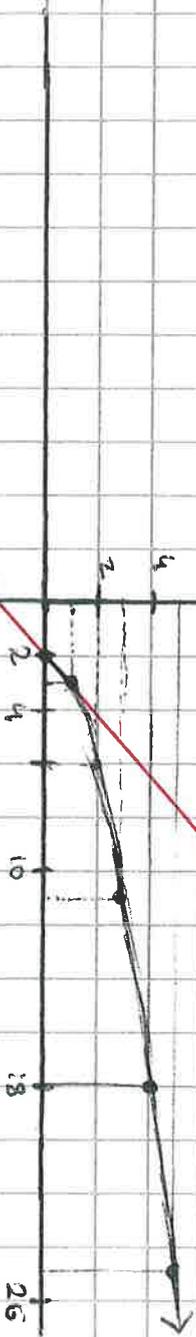


b)

$$4 - f(x) = \sqrt{x+2}$$

a)

x	y = $\sqrt{x+2}$
3	2.309
6	2.828
11	3.317
18	3.772
27	4.195
2	2



$$f'(3) = \frac{f(3.01) - f(3)}{3.01 - 3} = \frac{1.005 - 1}{0.01} = 0.499$$

b)