Alumna: Fátima del Rocío Salazar Gómez

Catedrático: Dra. Rosvani Margine Morales

Ejercicio de Límites

Biomatemáticas

2° “A

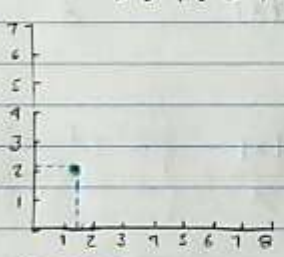
Comitán de Domínguez Chiapas a 20 de febrero de 2022.

EJERCICIOS

$\lim_{x \to a} f(x) = L$

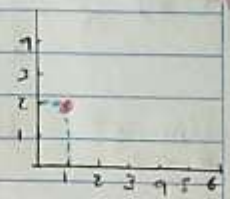
$\lim_{x \to 2.5} x^2 \quad \lim (2.5)^2 = 6.25$

$\lim_{x \to 1.5} x^2 \quad \lim (1.5)^2 = 2.25$



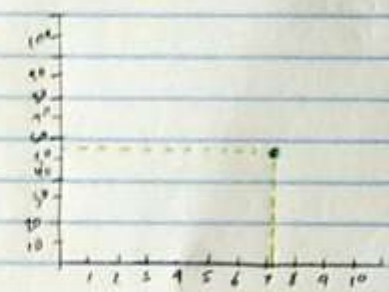
$\lim_{x \to 3} x^2 \quad \lim (3)^2 = 9$

$\lim_{x \to 1} \frac{x^2 - 1}{x - 1} \quad \lim \frac{(x-1)(x+1)}{x-1} = (x+1) = 1+1 = 2$

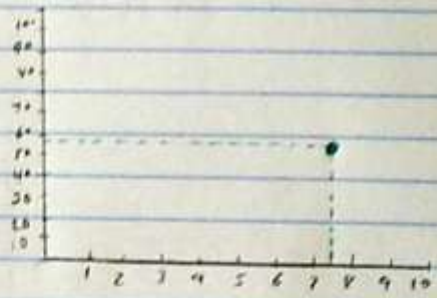


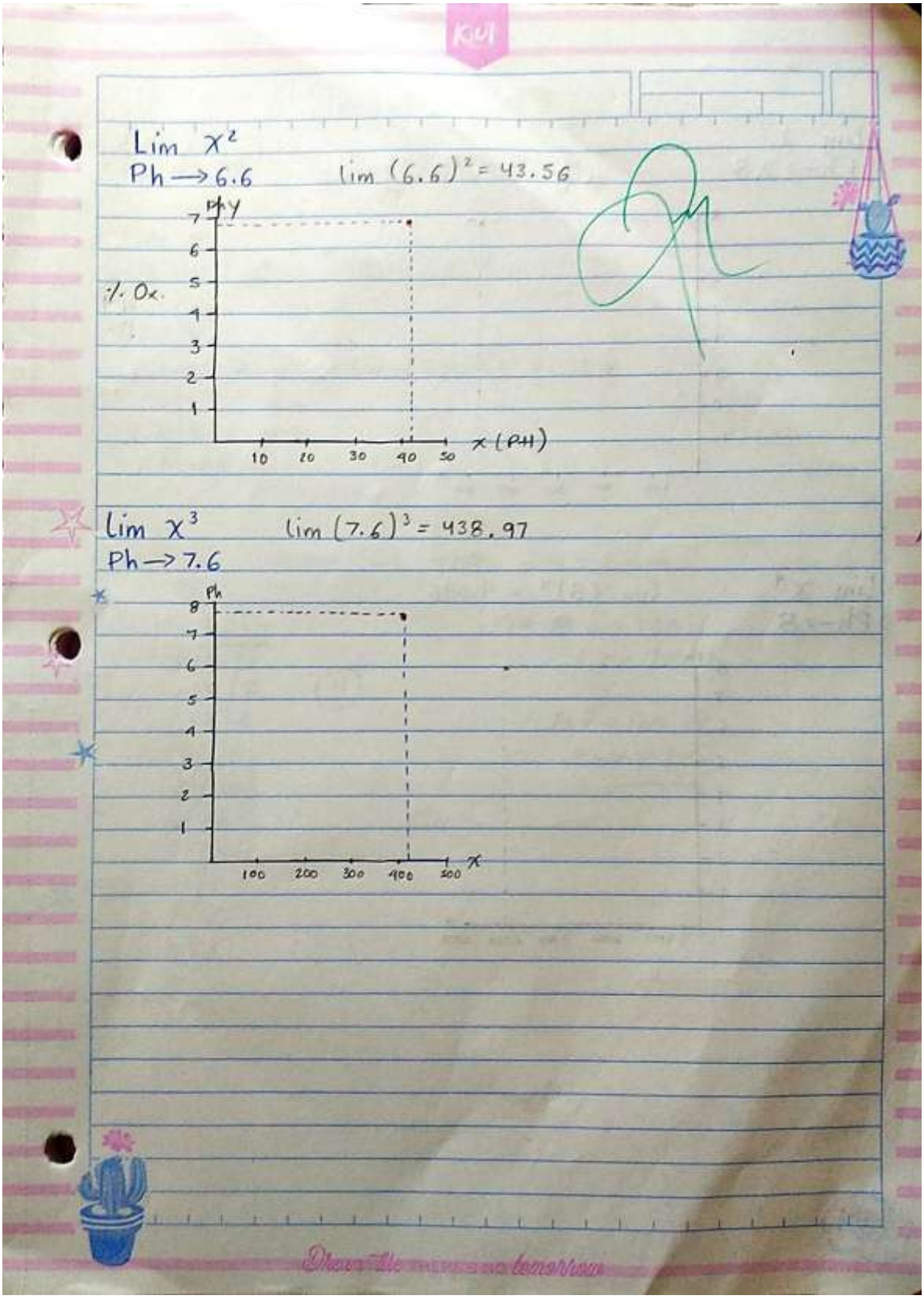
$\lim_{Ph \to 7.2} x^2 \quad \lim (7.2)^2 = 51.84$

$\lim_{Ph \to 7.4} x^2$ $\lim (7.4)^2 = 54.76$

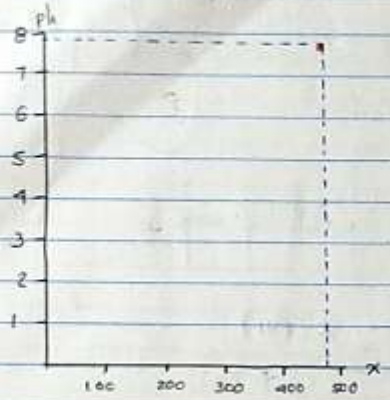


$\lim_{Ph \to 7.6} x^2$ $\lim (7.6)^2 = 57.76$

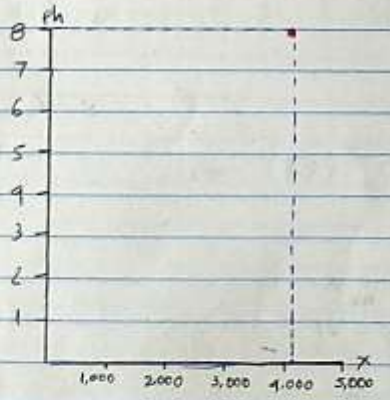


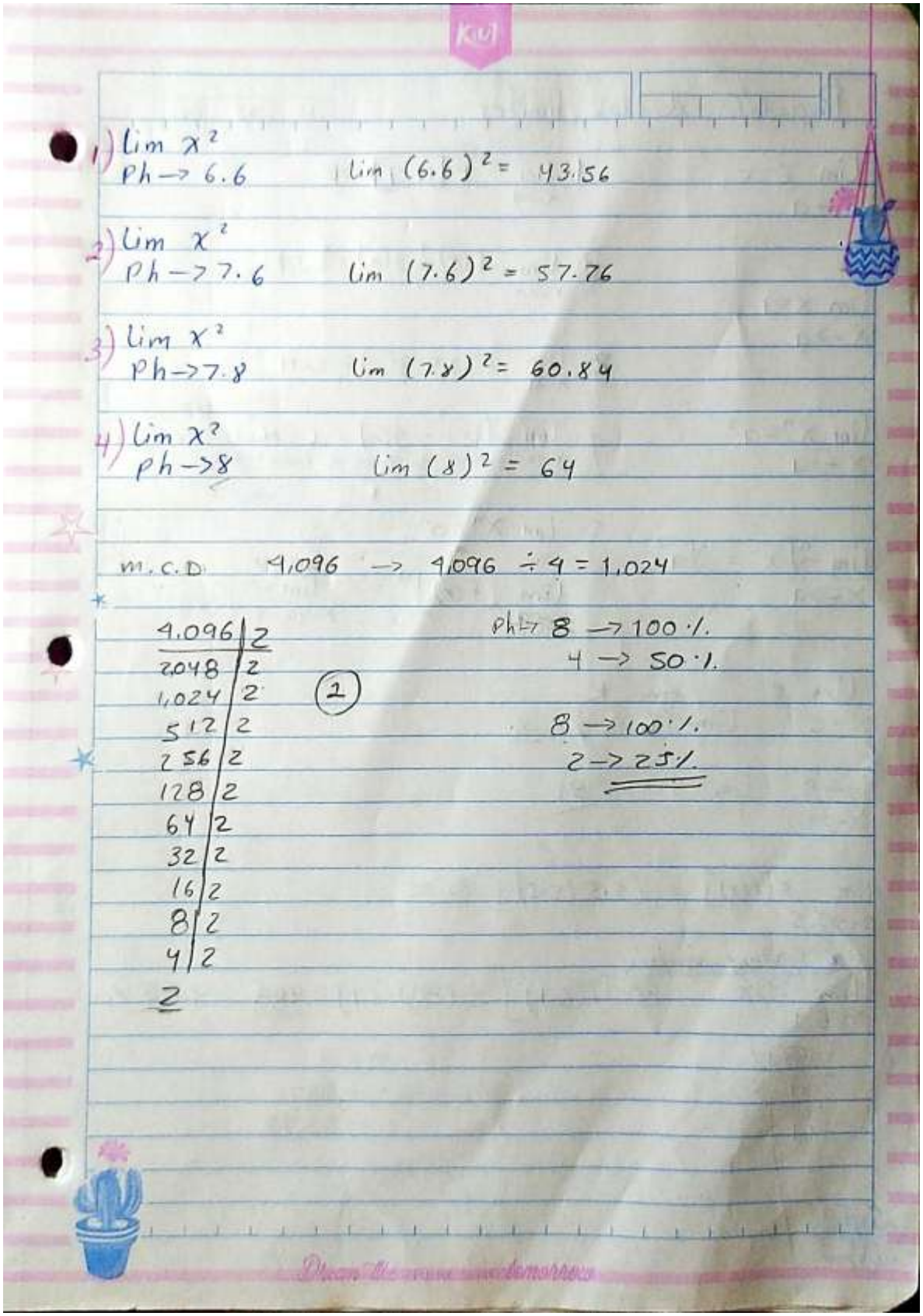

Lim x^2
Ph → 6.6
lim $(6.6)^2 = 43.56$
Ph y
7
6
5
4
3
2
1
10
20
30
40
50
x (PH)
Lim x^3
Ph → 7.6
lim $(7.6)^3 = 438.97$
Ph
8
7
6
5
4
3
2
1
100
200
300
400
500
x

$\lim x^3$
$Ph \to 7.8$ $\lim (7.8)^3 = 474.55$



$\lim x^4$ $\lim (8)^4 = 4,096$
$Ph \to 8$





1) $\lim x^2$ $Ph \to 6.6$ $\lim (6.6)^2 = 43.56$

2) $\lim x^2$ $Ph \to 7.6$ $\lim (7.6)^2 = 57.76$

3) $\lim x^2$ $Ph \to 7.8$ $\lim (7.8)^2 = 60.84$

4) $\lim x^2$ $Ph \to 8$ $\lim (8)^2 = 64$

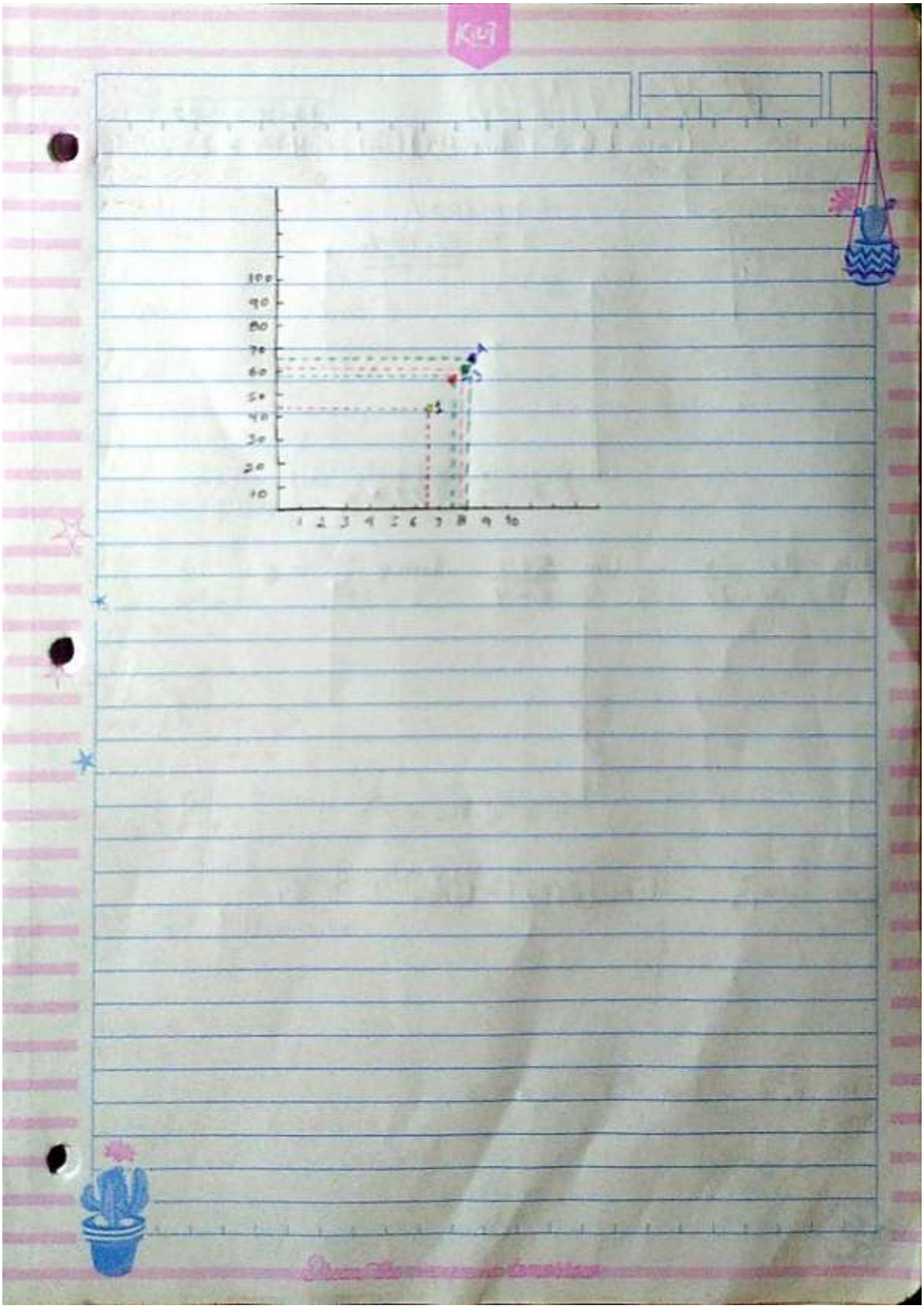
M.C.D 4,096 → 4,096 ÷ 4 = 1,024

4,096	2
2048	2
1,024	2
512	2
256	2
128	2
64	2
32	2
16	2
8	2
4	2
2	

(2)

Ph→ 8 → 100 %
4 → 50 %

8 → 100 %
2 → 25 %

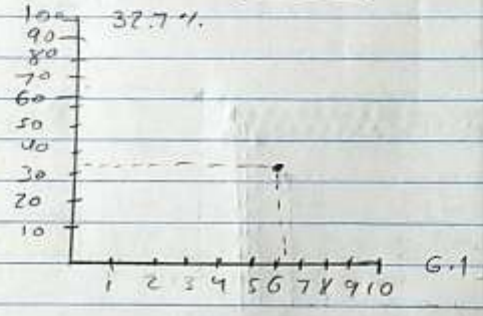

100
90
80
70
60
50
40
30
20
10
1 2 3 4 5 6 7 8 9 10

15 02 22

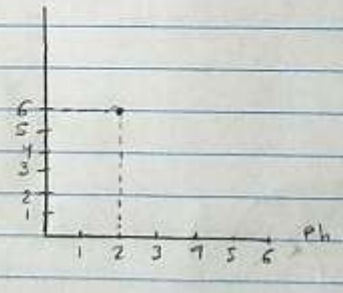
$\lim_{x \to 6.1} 80$ $\lim = KL$ $x \to a$ $\lim (80)(6.1) = 488 = 2$

mcd 488 | 2
244 | 2
122 | 2
61

6.1 — 100%
2 — 32.78%



$\lim_{x \to 2} \frac{4x + 2x}{3x - 2x}$ $\lim \frac{8+4}{6-4}$ $\lim = \frac{12}{2} = 6$



$\lim_{x \to 2} [2x]^3$ $\lim [2(2)]^3 = \lim = 4^3 = 64$

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

$\lim_{x \to a} = KL$

1) $\lim_{x \to 6} 6$ $\lim (6)(6) = 36$

2) $\lim_{x \to 9} 9$ $\lim (9)(9) = 81$

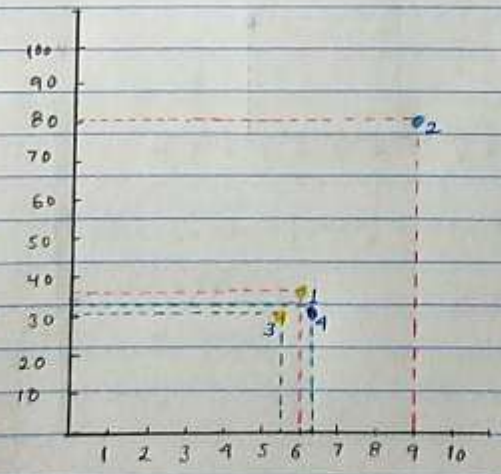
3) $\lim_{x \to 5.5} 5.5$ $\lim (5.5)(5.5) = 30.25$

4) $\lim_{x \to 6.1} 80$ $\lim (80)(6.1) = 488$

488	2
244	2
122	2
61	

m.c.d (2)

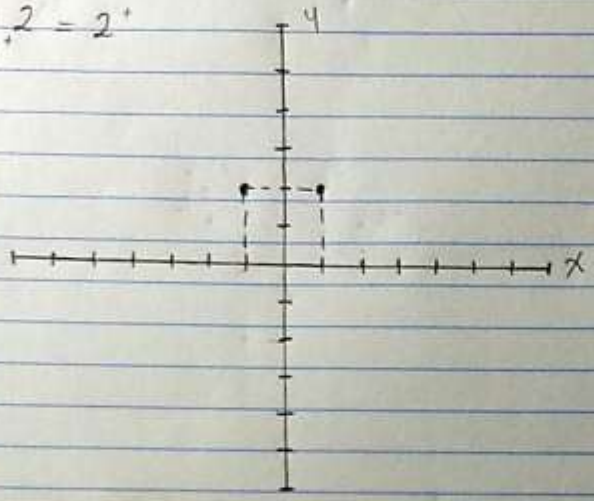
6.1 → 100%.
2 → 32.78 %.



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

$\lim_{x \to 1^-} x^2+1 \quad (1)^2+1 = 2^-$

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



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

$\lim_{x \to 2^-} x^2 \quad \lim 2^2 = 4$

$\lim_{x \to 2} 4$

$\lim_{x \to 2^+} 6-2x \quad \lim 6-4 = 2$