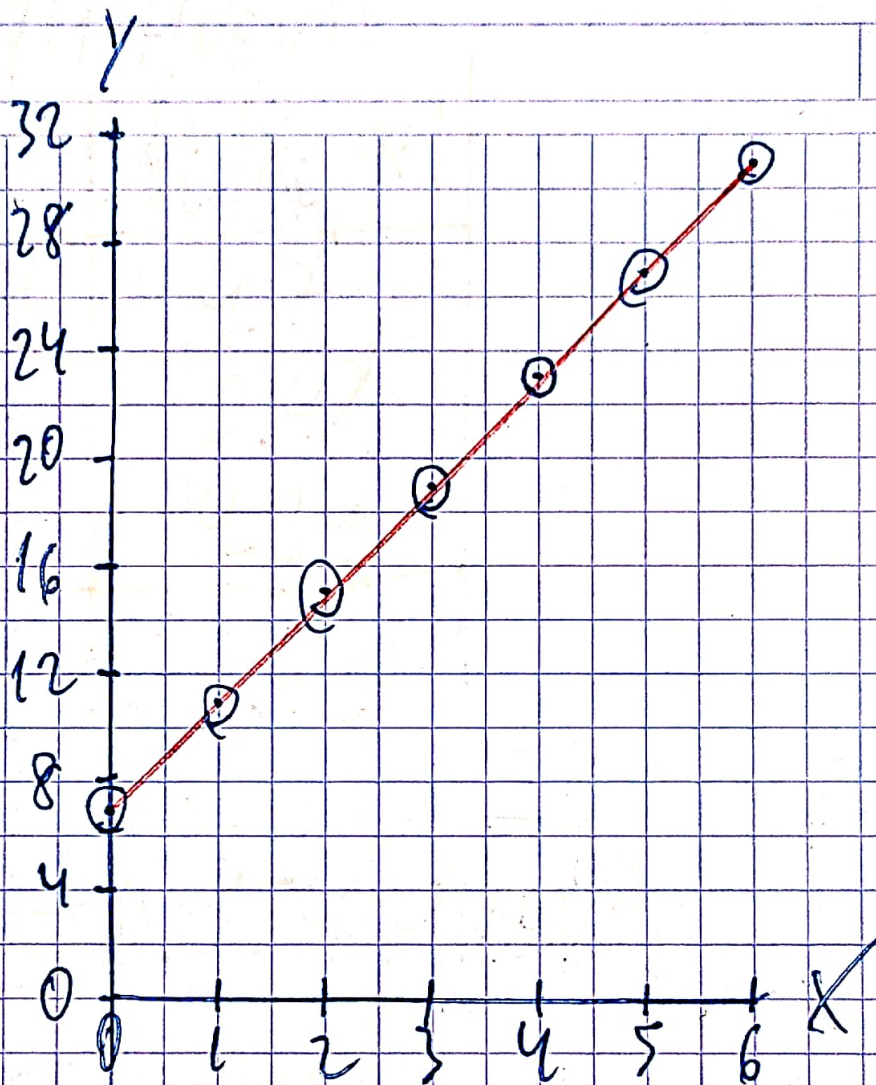




a) $y = 4x + 7$

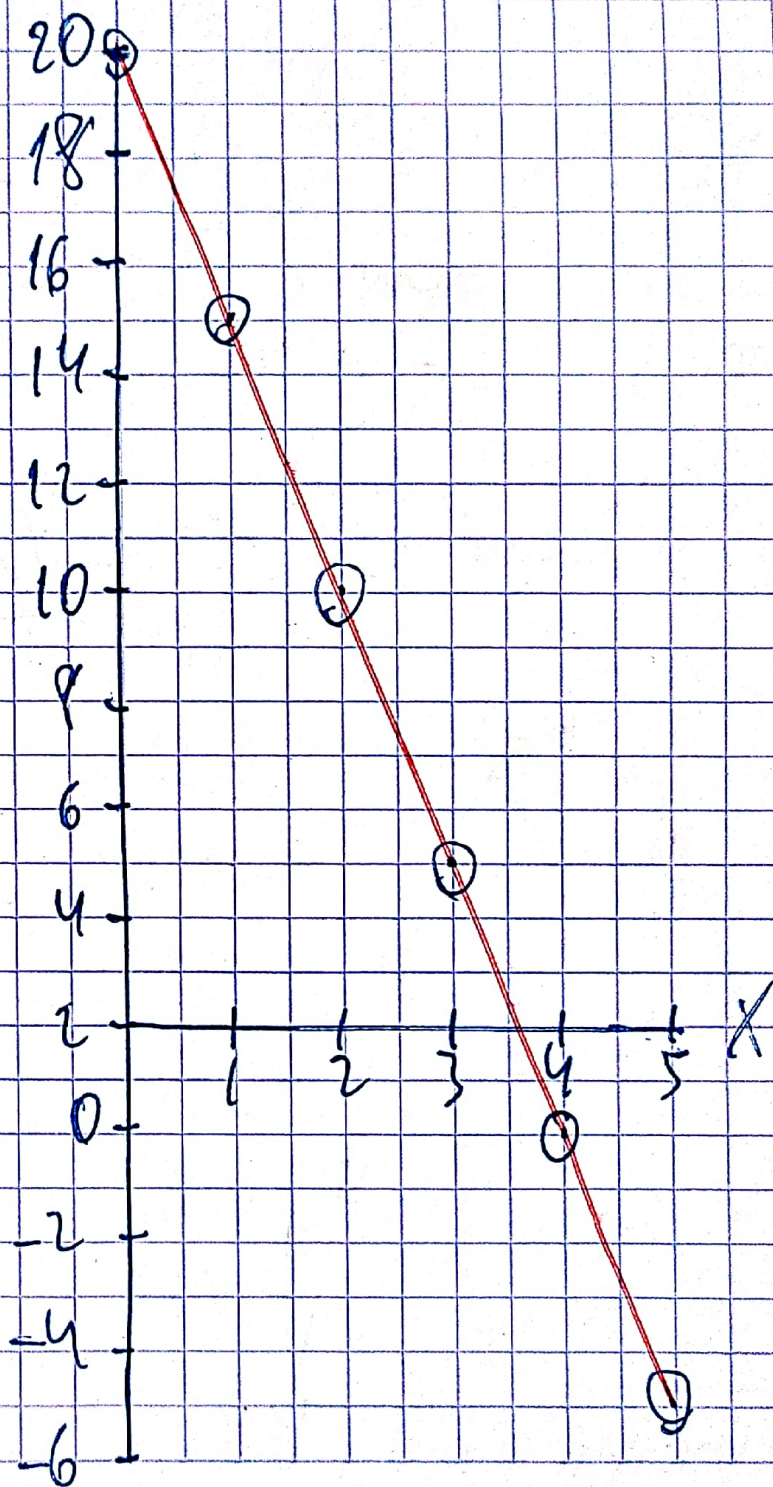


x	y
0	7
1	11
2	15
3	19
4	23
5	27
6	31



b) $y = -5x + 20$ y 20

x	y
0	20
1	15
2	10
3	5
4	0
5	-5





$$y = 2x^2 + 5x + 3$$

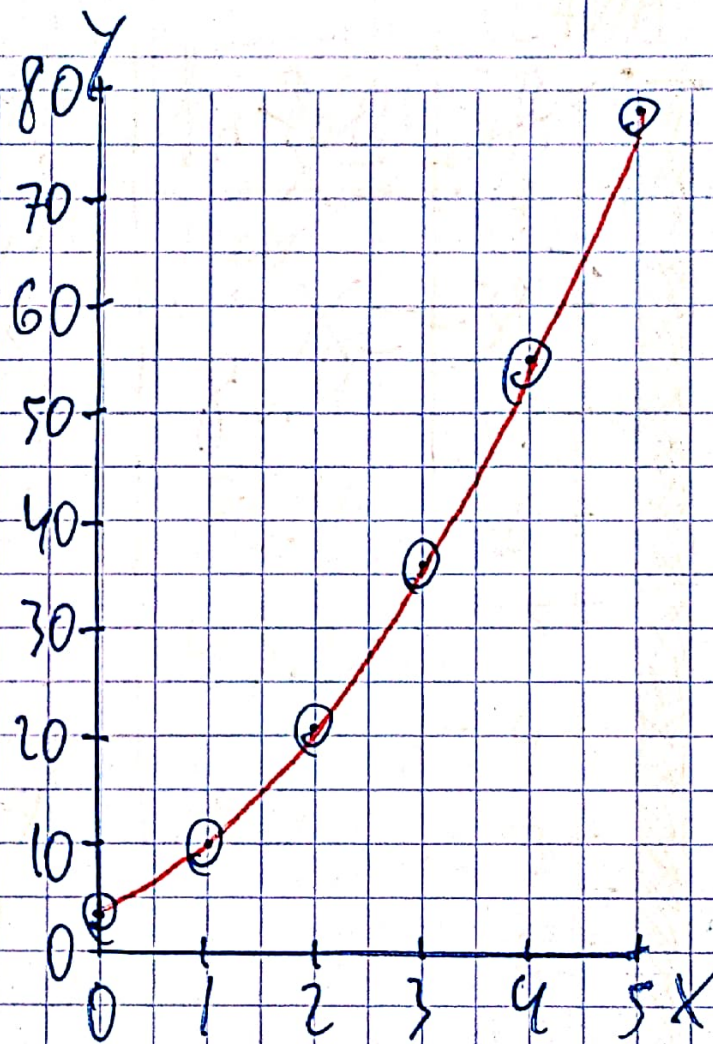


X	Y
0	3
1	10
2	21
3	36
4	55
5	78

$$2 \cdot 2^2 + 5 \cdot 2 + 3$$

$$2 \cdot 4 + 5 \cdot 2 + 3$$

$$8 + 10 + 3 = 21$$

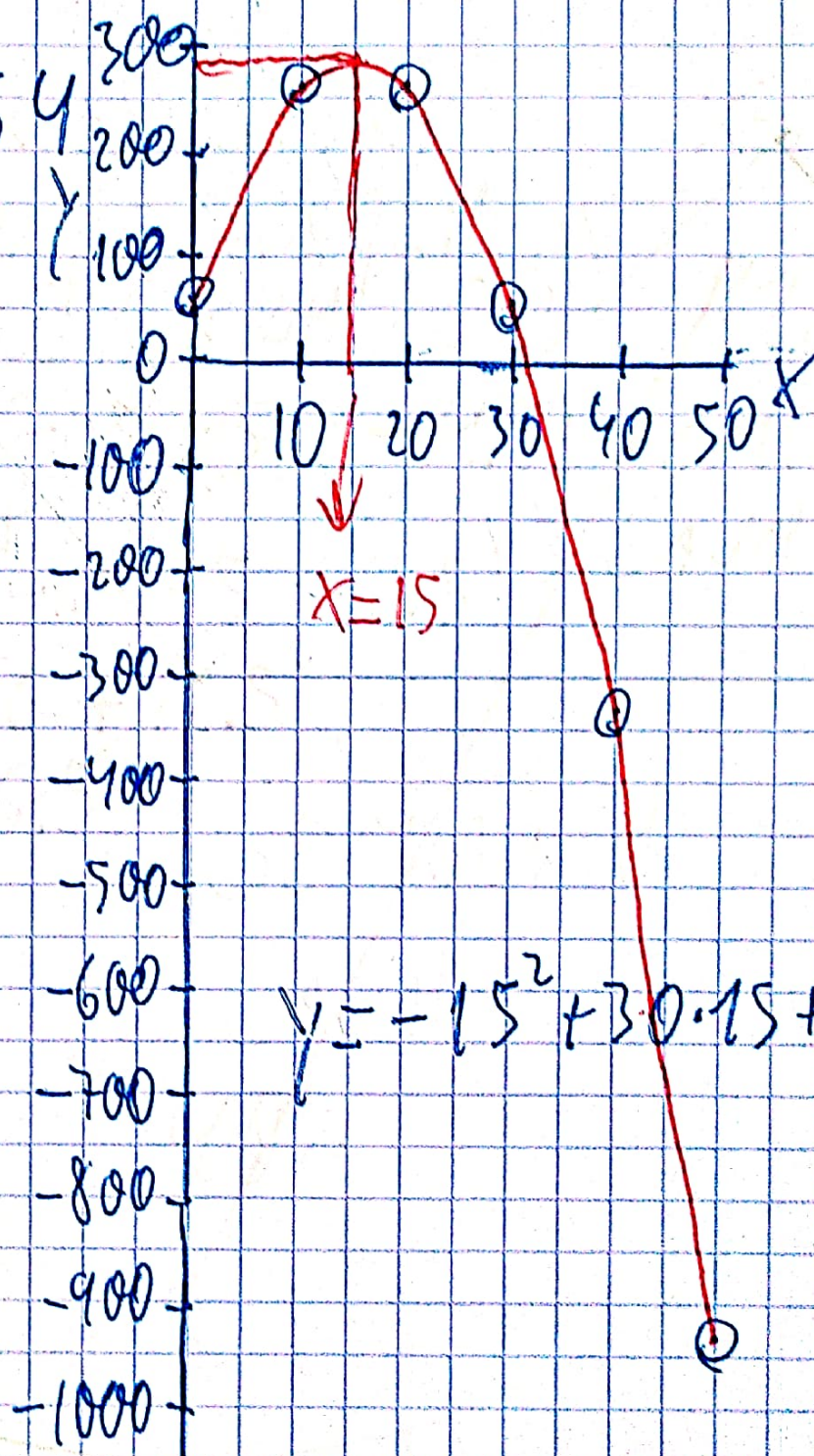


i) $y = -x^2 + 30x + 64$

X	y
0	64
10	264
20	264
30	64
40	-336
50	-936

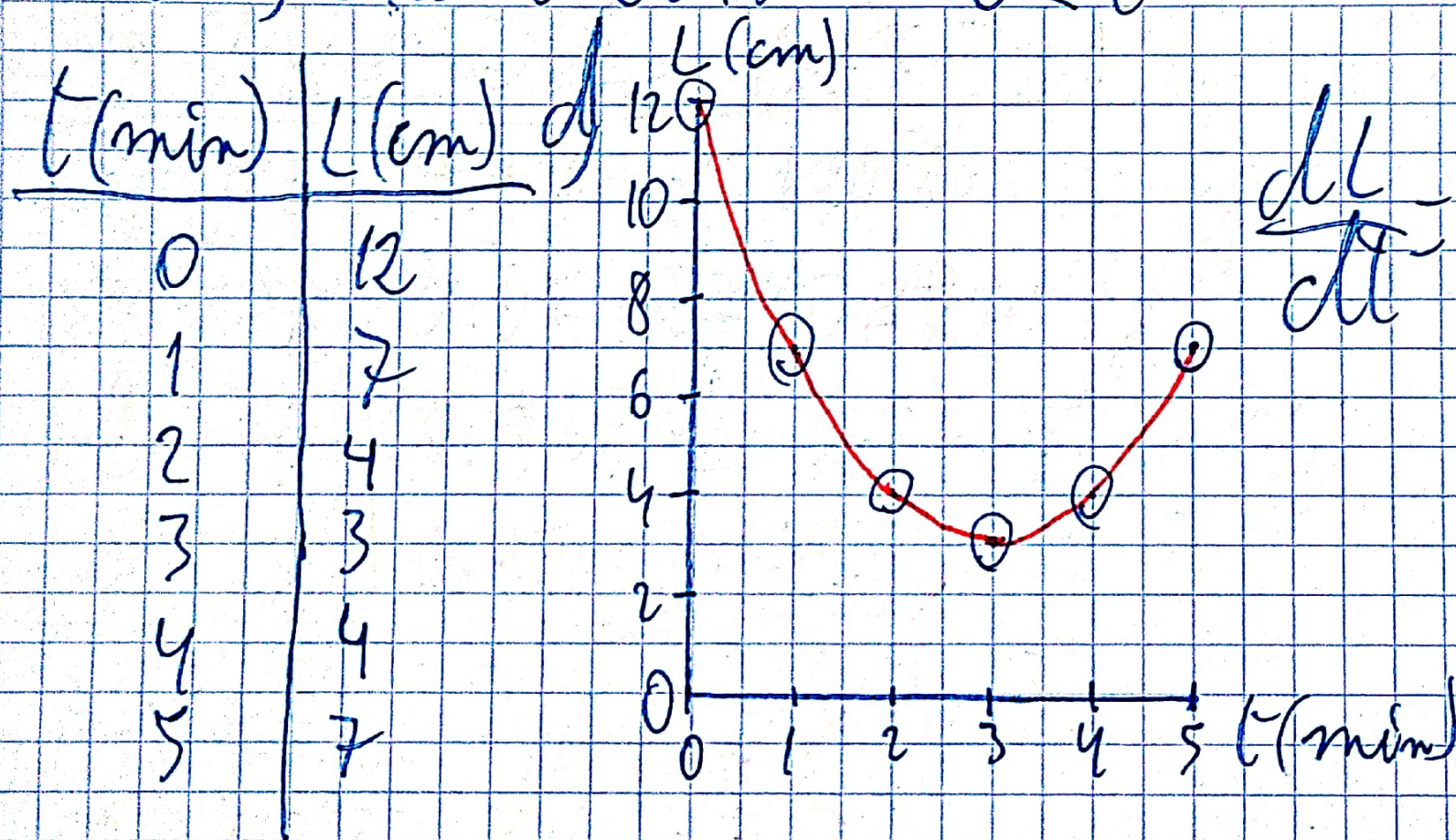
$$\frac{dy}{dx} = -2x + 30 = 0$$

$$x = \frac{-30}{-2} = 15$$



MAXIMO
↓
 $y = -15^2 + 30 \cdot 15 + 64 = 289$
(Para $x = 15$)

2022) $L(t) = t^2 - 6t + 12$ $0 \leq t \leq 5$



$$\frac{dL}{dt} = 2t - 6 = 0$$

$$t = \frac{6}{2} = 3 \text{ min}$$

a) INICIO = 12 cm FINAL = 7 cm

b) MÍNIMO A LOS 3 min

c) LONGITUD MÍNIMA: 3 cm

$$2021) M(t) = 2t^2 - 8t + 10$$

$$\frac{dM}{dt} = 4t - 8 = 0 \Rightarrow t = \frac{8}{4} = 2 \text{ min}$$

$t(\text{min})$	$M(\text{kg})$
-----------------	----------------

0 10

1 4

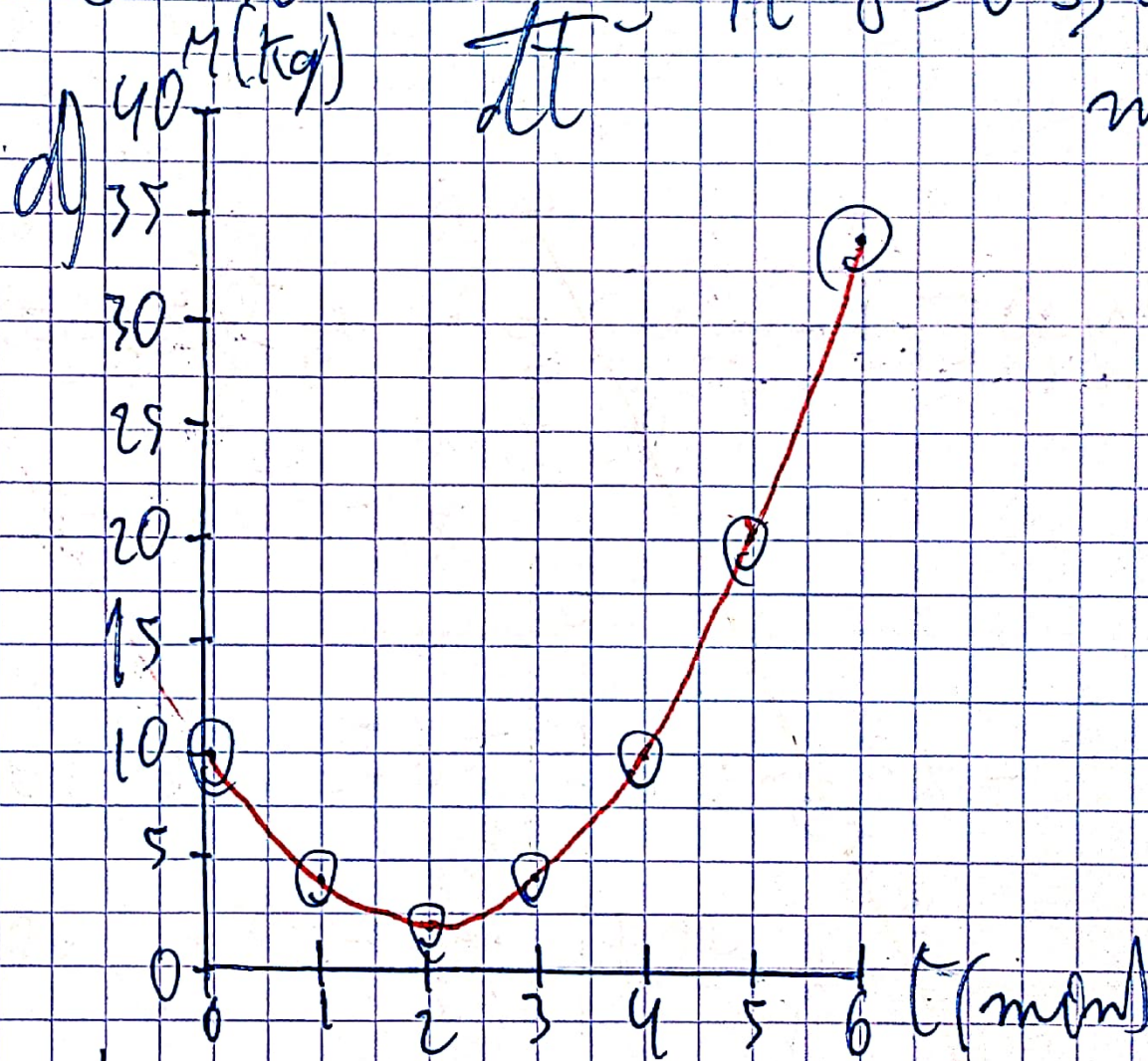
2 2

3 4

4 10

5 20

6 34



a) Inicio = 10 kg Final = 34 kg

b) Mínimo a los 2 min = 2 kg

g) INSTANTE EN EL QUE $M=20$ kg

$$20 = 2t^2 - 8t + 10$$

$$-2t^2 + 8t - 10 + 20 = 0$$

$$-2t^2 + 8t + 10 = 0$$

$$a = -2 \quad b = 8 \quad c = 10$$

$$t = \frac{-8 \pm \sqrt{8^2 - 4 \cdot (-2) \cdot 10}}{2 \cdot (-2)} = \frac{-8 \pm \sqrt{64 + 80}}{-4} = \frac{-8 \pm \sqrt{144}}{-4} = \frac{-8 \pm 12}{-4}$$

$$t = \frac{-8 + 12}{-4} = \frac{4}{-4} = -1 \text{ min} \quad \text{No VÁLIDA}$$

$$t = \frac{-8 - 12}{-4} = \frac{-20}{-4} = 5 \text{ min} \rightarrow \text{SOLUCIÓN}$$