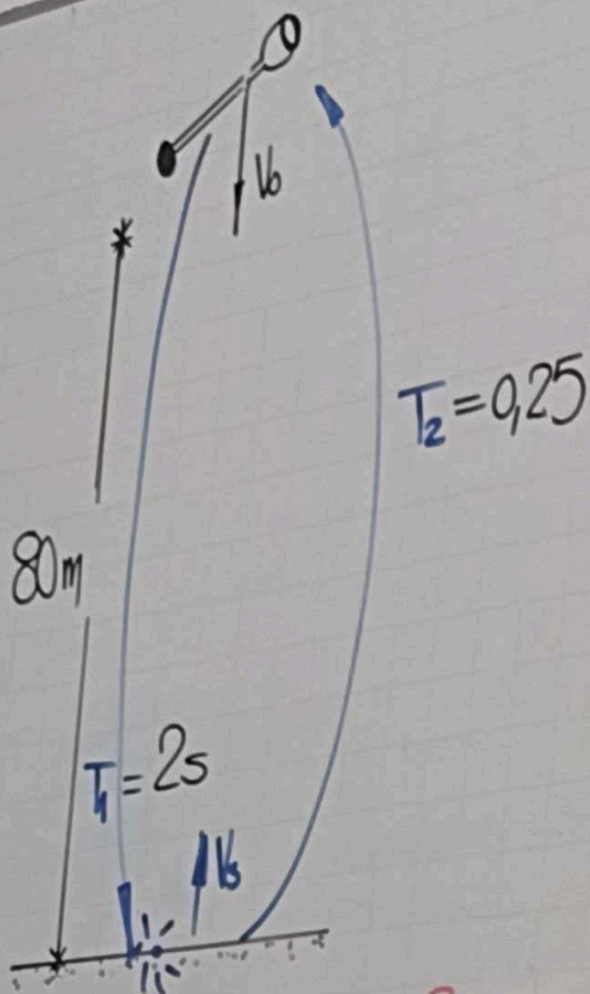


$$h = v_0 T + \frac{1}{2} g T^2 \quad T_1 + T_2 = 4,25s$$

$$h = 5 T_1^2 \quad T_1 + T_2 = 4 + 0,25$$

$$d = v_0 \cdot T_2$$

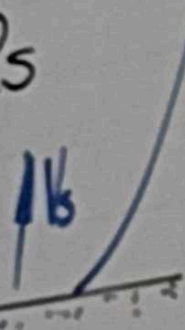
$$h = 320 \cdot T_2$$



$$h = v_0 T + \frac{1}{2} g T^2$$

$$80 = v_0 \cdot 2 + 5(2)^2$$

$$v_0 = 30 \text{ m/s}$$



$$= \frac{1}{2} v^2 + \frac{1}{2} g l^2$$

$$T_2 = 0,25$$

$$T = 4$$

(4s)

$$T = 0$$

(2)

30 m/s

$v =$

70 m/s

$v = 0$

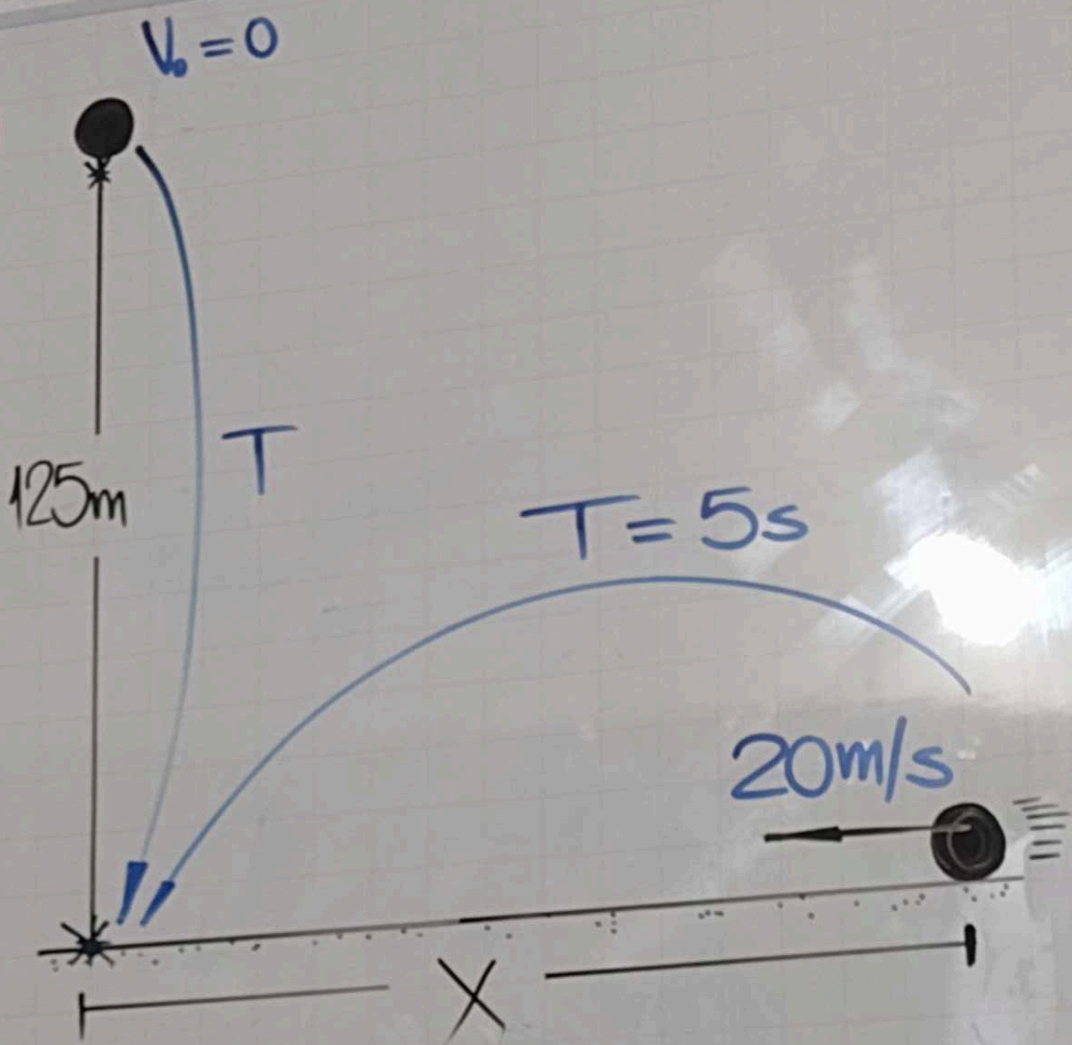
3s

3s

$T = 10$

(3)

(7)



$$h = \cancel{v_0 T} + \frac{1}{2} g T^2 \checkmark$$

$$d = v \cdot T$$

$$125 = 5 T^2$$

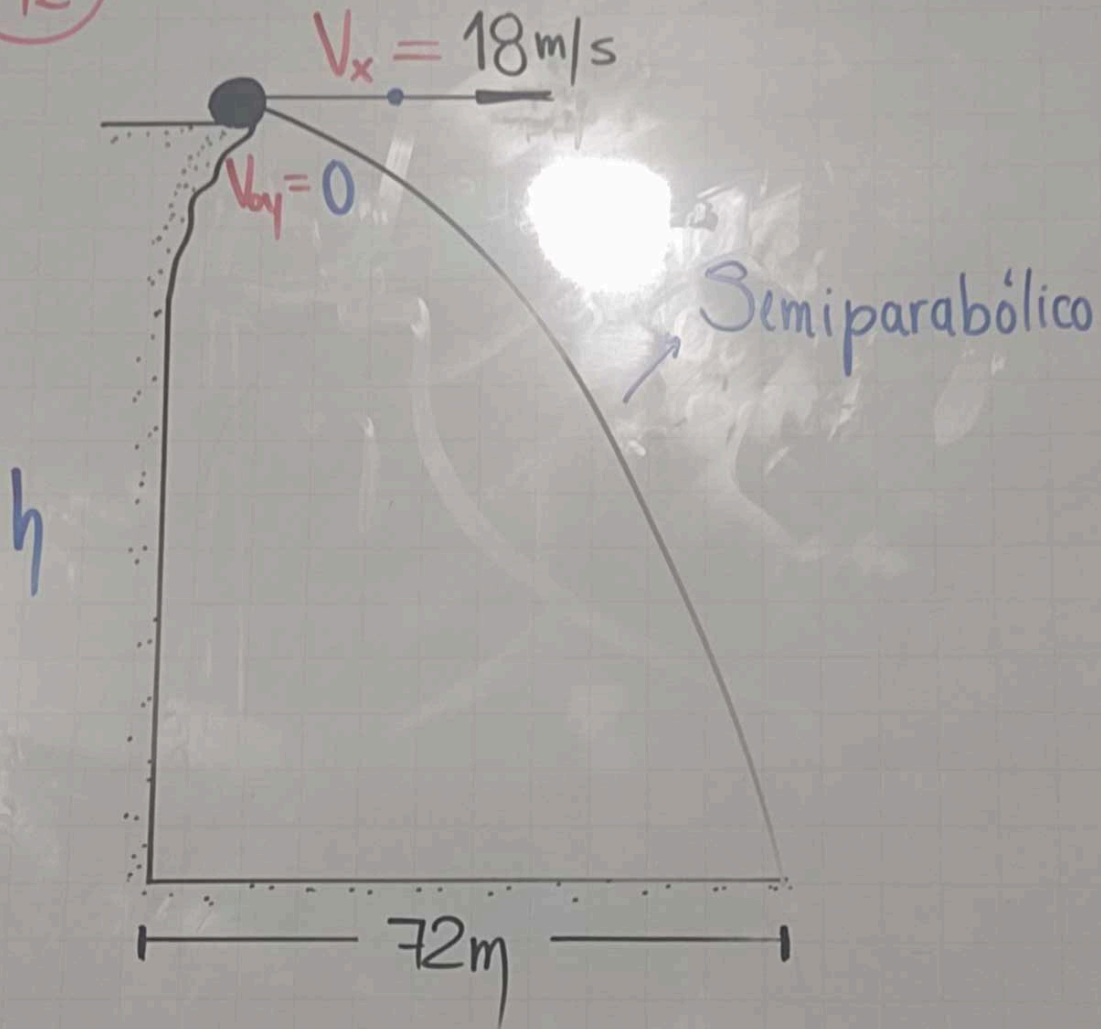
$$X = 20 \cdot 5$$

$$(T = 5\text{s})$$

$$X = 100\text{m}$$



12



$$d = V_x T$$

$$72 = 18 \cdot T$$

$$T = 4 \text{ s}$$

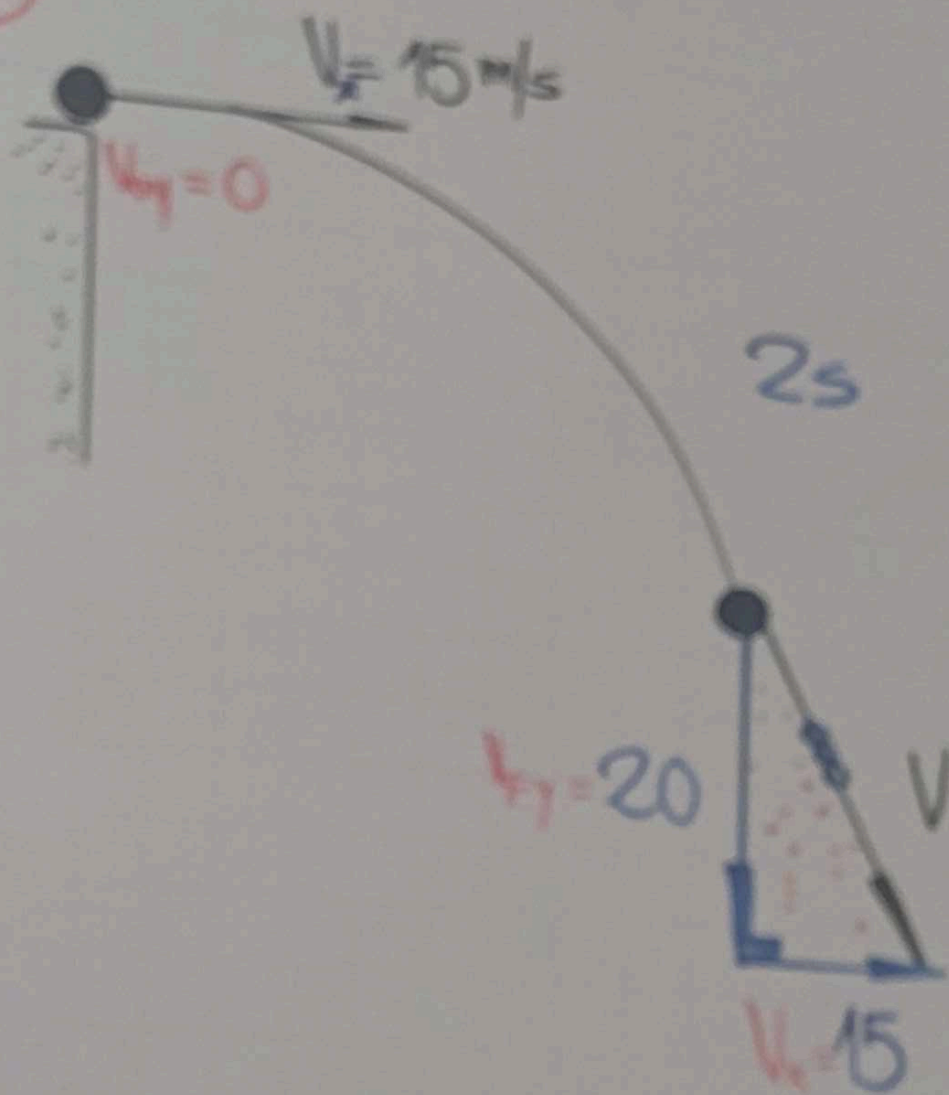
$$h = \cancel{V_{oy} T} + \frac{1}{2} g T^2$$

$$h = 5 T^2$$

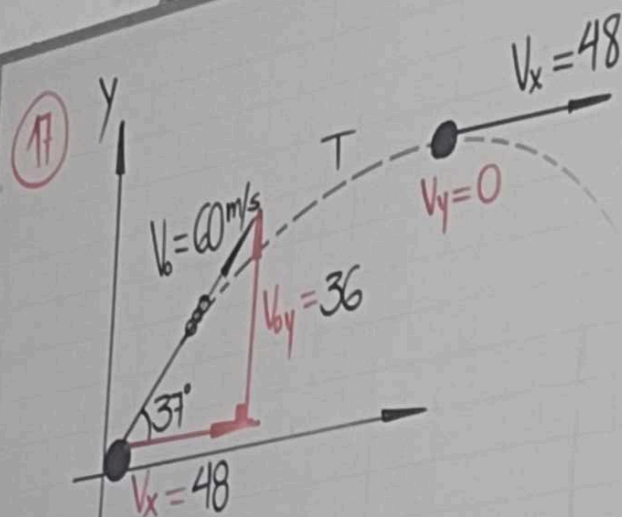
$$h = 5 (4)^2$$

$$\therefore h = 80 \text{ m}$$

13



$$v = 25 \text{ m/s}$$



$$T = 3.6 \text{ s}$$

18

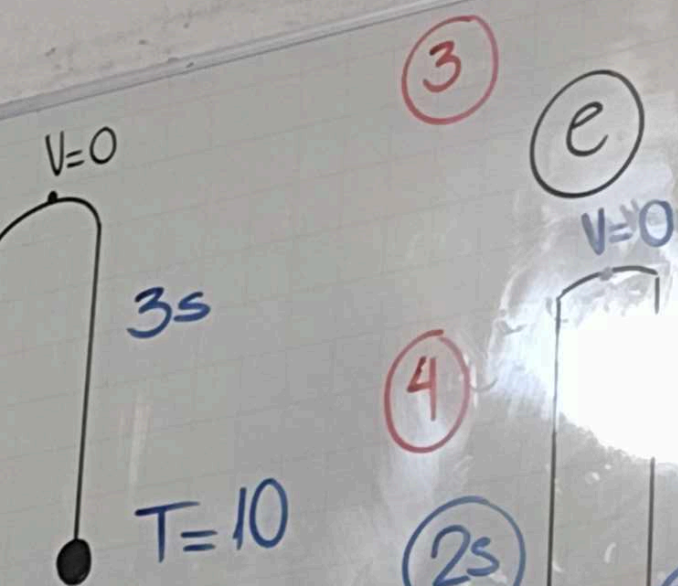
Parabólico.

$$h_{\text{máx}} = \frac{1}{8} g T_v^2$$

$$h_{\text{máx}} = \frac{1}{8} (10) (8)^2$$

$$h_{\text{máx}} = 80 \text{ m}$$





$$V_F^2 = V_0^2 + 2gh$$

$$(20)^2 = V^2 + 2(10)(60)$$

$$3V^2 = 1200$$

$$V = 20 \text{ m/s}$$

$0 \text{ m/s}$

$$20 = V$$

$$h = 60 \text{ m}$$

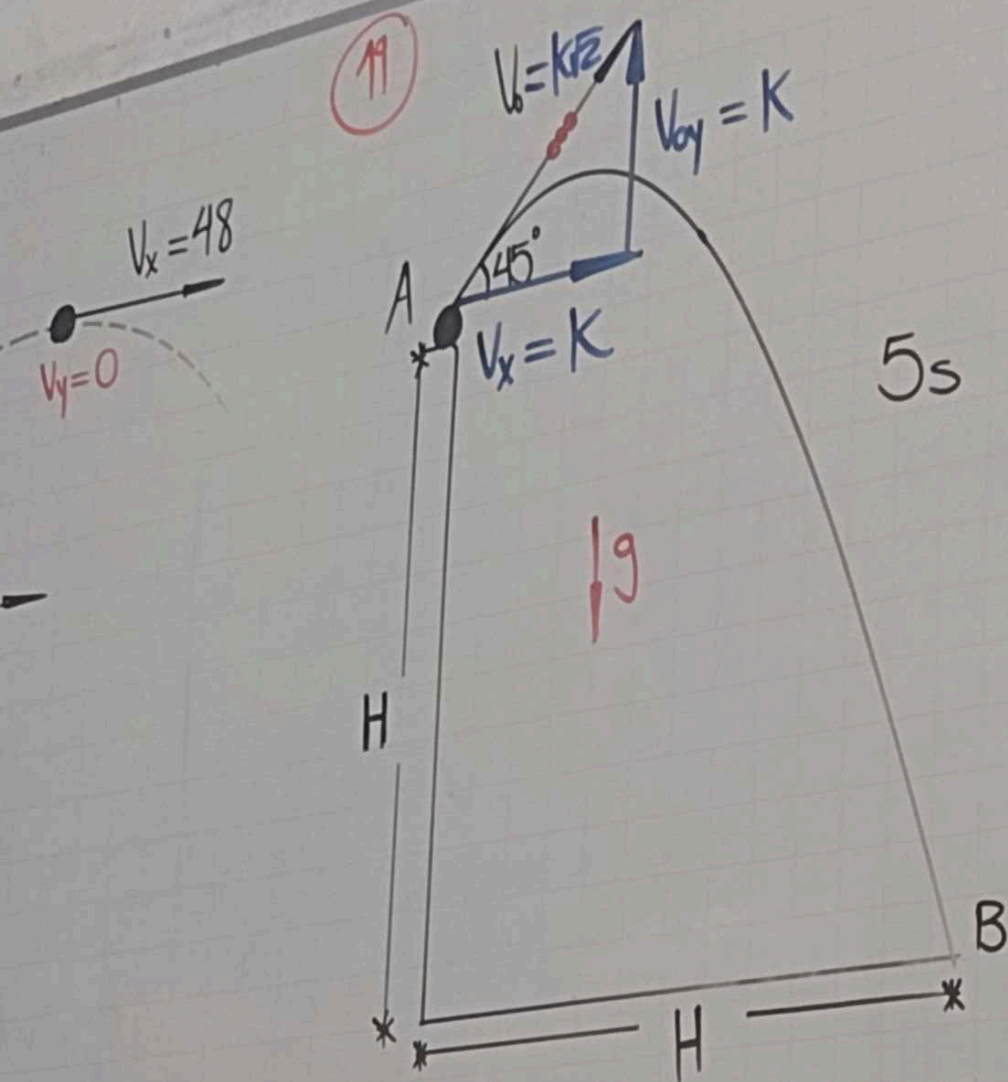
$$V = 20$$

$\downarrow g$

(2s)

$$2V = 40$$

$$T_{\text{TOTAL}} = 6 \text{ s}$$



$$d = V_x T$$

$$\vec{h} = \vec{V}_{oy} T + \frac{1}{2} \vec{g} T^2$$

$$H = K \cdot 5 \quad - H = K(5) + \frac{1}{2} (-10)(5)^2$$

$$H = (12,5)(5) \quad - 5K = 5K - 125$$

$$H = 62,5m \quad K = 12,5$$



(15)

$$V_x = 15 \text{ m/s}$$

$$V_{0y} = 0$$

$$x = 100 \text{ m}$$

4k

5k

3k

53°

53°

$$*) d = V_x \cdot T$$

$$3k = 15 \cdot T$$

$$k = 5T$$

$$k = 20$$

$$*) h = V_{0y} T + \frac{1}{2} g T^2$$

$$4k = 5T^2$$

$$4(5T) = 5T^2$$

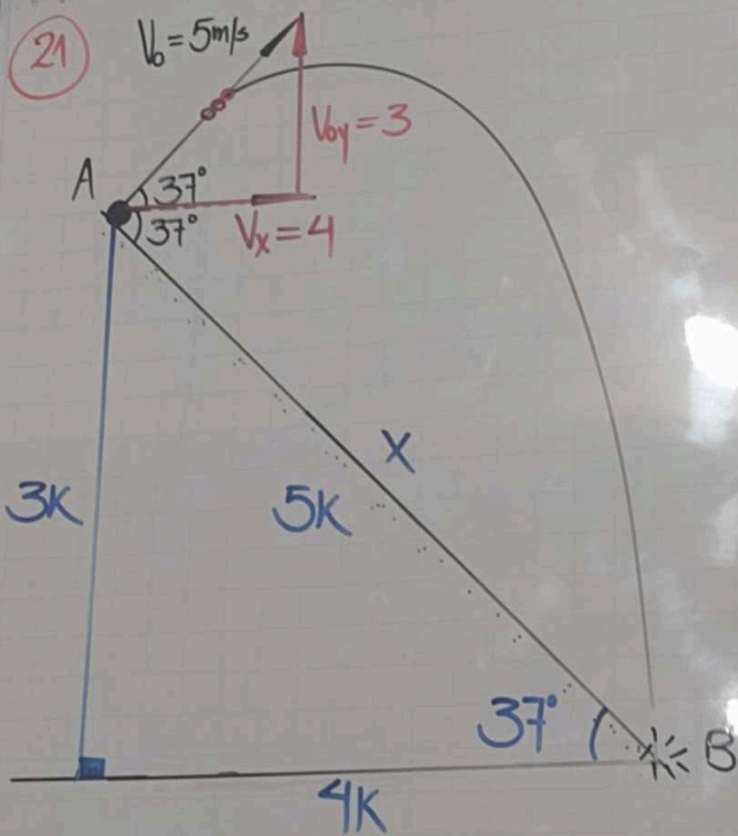
$$T = 4 \text{ s}$$

$$V_{0y} T + \frac{1}{2} g T^2$$

$$k(5) + \frac{1}{2} (-10)(5)^2$$

$$= 5k - 125$$

$$k = 12,5$$



$$\checkmark d = V_x \cdot T$$

$$4k = 4 \cdot T$$

$$k = T$$

$$\checkmark \vec{h} = \vec{V}_{0y} T + \frac{1}{2} \vec{g} T^2$$

$$-3k = 3T + \frac{1}{2} (-10) T^2$$

$$-3T = 3T - 5T^2$$

$$5T = 6$$

$$T = 6/5$$

$$X = 5 \left( \frac{6}{5} \right)$$

$$X = 6 \text{ m}$$

16

A

$$v_b = 30$$

