

Semana 22

17 $\theta 40^\circ$ $V_0 9 \text{ m/s}$ $y 30 \text{ m}$

$$V_{0x} = 9 \text{ m/s} \cdot \cos 40^\circ = 6.89 \text{ m/s}$$

$$V_{0y} = 9 \text{ m/s} \cdot \sin 40^\circ = 5.79 \text{ m/s}$$

$$t_s = 0.59 \text{ s} \quad t = \frac{\sqrt{2y}}{g}$$

$$t = \frac{\sqrt{63.42 \text{ m}}}{9.8 \text{ m/s}^2}$$

$$t = \sqrt{6.42 \text{ s}}$$

$$t = 2.54 \text{ s}$$

$$y_{\text{max}} = \frac{V_{0y}^2}{2g} = \frac{5.79 \text{ m/s}^2}{2 \times 9.8 \text{ m/s}^2}$$

$$H_{\text{max}} = 1.71 \text{ m}$$

$$x = V_{0x} t_v = t_v = t_s t =$$

$$t_v = 3.13 \text{ s} \quad x = 6.89 \text{ m/s} \cdot 3.13$$

$$x = 21.57 \text{ m}$$

$$21 \theta 37^\circ$$

$$V_0 = 20 \text{ m/s}$$

$$V_{0x} = 15.97 \text{ m/s}$$

$$V_{0y} = 12.04 \text{ m/s}$$

$$t_{\text{max}} = v_y - v_{0y} \quad t_{\text{max}} = 0 \quad 12.04 \text{ m/s}$$

$$V_{0y} = 12.04 \text{ m/s}$$

$$H_{\text{max}} = 144.96 \text{ m/s}^2$$

$$a = H_{\text{max}} = 2.40 \text{ m} \quad t_s = 2.00 \text{ s} = 9$$

$$t_v = 1.52 \quad t_s = 1.23 \text{ seg}$$

$$b = t_v = 2.46 \text{ seg} \quad x = V_{0x} \cdot t_v$$

$$x = 15.97 \text{ m/s} \quad 2.46 \text{ s}$$

$$C = x = 39.29 \text{ m}$$

$$37 \theta 50^\circ$$

$$V_0 = 20 \text{ m/s}$$

$$V_{0x} = 12.86 \text{ m/s}$$

$$V_{0y} = 15.32 \text{ m/s}$$

$$t_{\text{max}} = V_{0y} = V_{0y}^2 \times 70^\circ 41.53^\circ$$

$$H_{\text{max}} = 2.34.74$$

$$t_s = V_{0y} \quad 9 \text{ s} \quad 1.56 \text{ s} \quad t_v = 2.11 \text{ s}$$

$$a = t_v = 3.12 \text{ s} \times 9 \quad x = V_{0x} \cdot t_v$$

$$C = x = 40.12 \text{ m}$$

$$47 \theta 50^\circ$$

$$V_0 = 20 \text{ m/s}$$

$$V_{0x} = 12.86 \text{ m/s}$$

$$V_{0y} = 15.32 \text{ m/s}$$

$$t_s = 1.50 \text{ seg} \quad t_v = 2 \text{ s} \quad t_v = 3.12$$

$$H_{\text{max}} = 11.97 \text{ m} \quad x = V_{0x} \cdot t_v = 40.12 \text{ m}$$

$$\text{angulo } 40^\circ$$

$$V_{0x} = 15.32 \text{ m/s}$$

$$t_s = 1.31 \text{ s} \quad t_s = 2.11$$

$$V_{0y} = 12.86 \text{ m/s}$$

$$x = 40.13 \text{ m}$$

$$t_s = V_{0y} \quad 9$$

$$t_v = 2.62$$

$$57.045^\circ$$

$$V_0 = 40 \text{ m/s}$$

$$V_{0x} = 28.28 \text{ m/s}$$

$$V_{0y} = 28.28 \text{ m/s}$$

$$t_s = 2.89 \text{ s} \quad a = t_v = 5.78$$

$$H_{\max} \quad V_y^2 = V_{0y}^2 \quad H_{\max} \frac{799.76}{19.6}$$

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$$H_{\max} = 40.80 \text{ m} \quad c = x = 163.46 \text{ m}$$