

$$F = M \frac{d^2 x}{dt^2}$$

$$-kx = M \frac{d^2 x}{dt^2}$$

$$M \frac{d^2 x}{dt^2} + kx = 0$$

$$\left| \frac{d^2 x}{dt^2} + \frac{k}{M} x = 0 \right.$$

$$F(t, x(t), x'(t), x''(t)) = 0$$

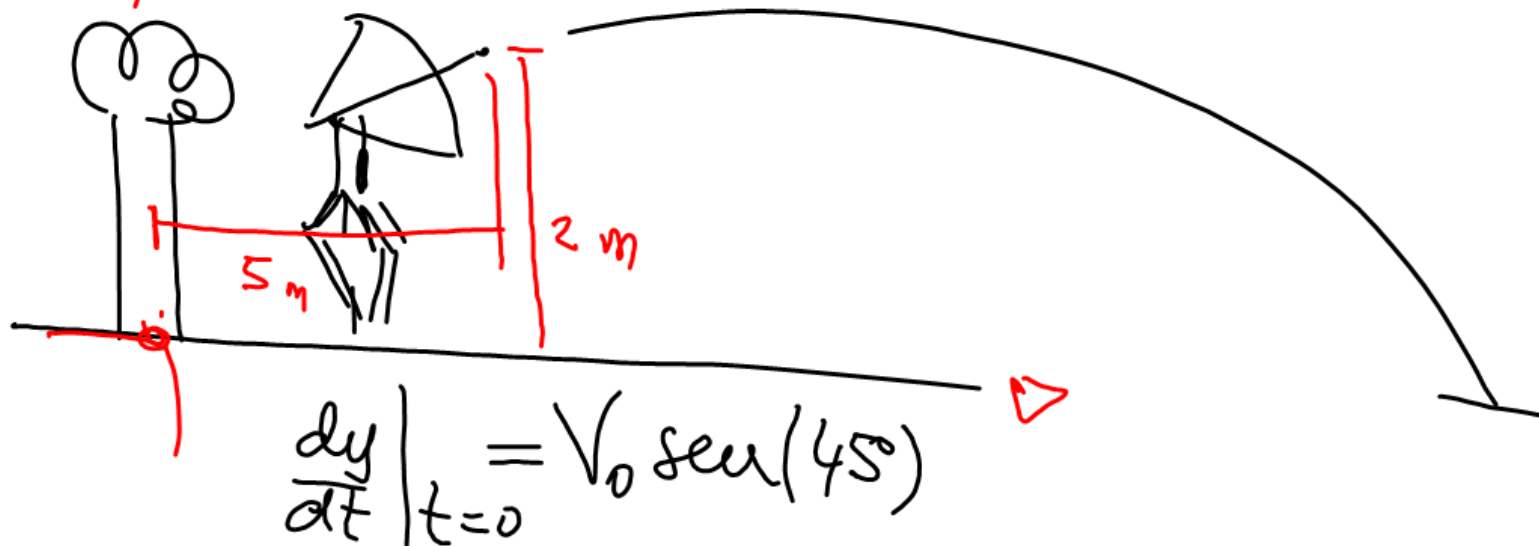
TIRO PARA BÓLICO

vertical $\frac{d^2y(t)}{dt^2} = -g$

horizontal $\frac{dx}{dt} = V_0 \cos(45^\circ)$

$y \uparrow$ $y_0 = 2 \text{ [m]}$

$x_0 = 5 \text{ [m]}$



| A | B | C | D |
|--------|------|-------|--------------|
| flecha | peso | largo | material |
| 1 | 16 | 62 | madera |
| 2 | 29 | 78 | madera |
| 3 | 22 | 67 | aluminio |
| 4 | 30 | 67 | aluminio |
| 5 | 30 | 71 | aluminio |
| 6 | 20 | 72 | madera |
| 7 | 24 | 72 | aluminio |
| 8 | 32 | 81 | aluminio |
| 9 | 33 | 77 | fibra vidrio |
| 10 | 32 | 74 | aluminio |
| | | | |

TAREA #2

¿Cuál flecha
llega más
lejos?

Viernes 8 de febrero