

①

$V = 60 \text{ m/s} - \text{Km/h por } 18/5 \quad 216 \text{ km/h}$

$D = 15 \text{ m}$

$T = \frac{d}{V} = \frac{15 \text{ m}}{60 \text{ m/s}} = 0.25 \text{ s}$

②

$V \text{ constante } 3 \times 10^8$

Tiempo

$\text{Distancia} = 1.5 \times 10^8$

$V = 300.000 \text{ km/s}$

$X = 150.000.000 \text{ km}$

$\frac{150.000.000 \text{ km}}{300.000 \text{ km/s}} \quad t = 500$

$\downarrow$   
 $8.3 \text{ min}$

③

$\frac{50 - 35}{45 - 25} = 0.75$

$\frac{50 - 50}{35 - 45} = 0$

$\frac{0 - 50}{10 - 35} = -2$

④

$t = 4 \text{ s}$

$g = 9.8 \text{ m/s}^2$

$X = X_0 + V_0 t + \frac{1}{2} a t^2$

$X = \frac{1}{2} g t^2$

$\frac{1}{2} (9.8) (4)^2 = 78.4 \text{ m}$



5

$$V_f = V_0 + 2ax$$

$$0^2 + 2 \times 9.8 \cdot 70$$

$$= 1372 \div \frac{1}{2} = 27.4$$

Recorrido = 70m