Mecánica
Problemas Clases

S1e7J

Contents

Chapter 1

Clase 1

1.1 Primera Pregunta

$$t = t_s + t_c$$

$$t = \frac{h}{v_s} + \sqrt{\frac{2h}{g}}$$

$$t - \frac{h}{v_s} = \sqrt{\frac{2h}{g}}$$

$$\left(t - \frac{h}{v_s}\right)^2 = \frac{2h}{g}$$

$$t^2 - \frac{2th}{v_s} + \frac{h^2}{v_s^2} = \frac{2h}{g}$$

$$t^2 - h\left(\frac{2t}{v_s} + \frac{2}{g}\right) + \frac{h^2}{v_s^2} = 0$$

$$h = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$h = \frac{2\left(\frac{t}{v_s} + \frac{1}{g}\right) \pm \sqrt{2\left(\frac{t}{v_s} + \frac{1}{g}\right)^2 - 4\left(\frac{1}{v_s^2}\right)(t^2)}}{\frac{2}{v_s^2}}$$

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