Física Semana 3

1) $V_{ox} = 20$ mts/s $Y = 6$ mts $g = 9.8$ mt/s²

a) $X = V_{ox} \cdot t$

$X = 20$ mts/s $\times$ 1.11 seg

$X = 22.2$ mts //

b) $t = \sqrt{\frac{2Y}{g}}$

$t = \sqrt{\frac{(2)(6\ mts)}{9.8\ mts/s^2}}$

$t = \sqrt{1.22\ seg^2}$

$t = 1.11$ seg

2) $Y = 100$ mts $X = 80$ mts $g = 9.8$ mts/s²

a) $V_{ox} = \frac{X}{T}$

$V_{ox} = \frac{80\ mts}{4.52\ seg}$

$V_{ox} = 17.70$ mts/seg //

b) $t = \sqrt{\frac{2Y}{g}}$

$t = \sqrt{\frac{(2)(100\ mts)}{9.8\ mts/s^2}}$

$t = \sqrt{20.40\ seg^2}$

$t = 4.52\ seg^2$

3) $V_{ox} = 5.5\ mts/s \quad Y = 2\ mts \quad g = 9.8\ mts/s^2$

a) $x = V_{ox} \cdot t$

$x = 5.5\ mts/s \times 0.63\ seg$

$x = 3.47\ mts$

b) $t = \sqrt{\frac{2Y}{g}}$

$t = \sqrt{\frac{(2)(2)\ mts}{9.8\ mts/s^2}}$

$t = \sqrt{0.40\ s^2}$

$t = 0.63\ seg$

4) $V_{ox} = 1.8\ mts \quad t = 3\ seg \quad g = 9.8\ mts/s^2$

a) $Y = \frac{g \cdot t^2}{2}$

$Y = \frac{9.8\ mts/seg^2\ (3\ seg)^2}{2}$

$Y = \frac{88.2\ mts}{2} \qquad Y = 44.1\ mts$

b) $x = V_{ox} \cdot t$

$x = 1.8\ mts/s \times 3\ seg$

$x = 5.4\ mts.$

5) $V_{ox} = 26\ cm/s$ $Y = 12\ cm$ $g = 9.8\ m/s^2$

a) $x = V_{ox} \cdot t$

$x = 26\ cm/s \times 0.38\ seg$

$x = 9.88\ cm$

b) $t = \sqrt{\frac{2Y}{g}}$

$t = \sqrt{\frac{(2)(12\ cm)}{980\ cm/s^2}}$

$t = \sqrt{0.15\ seg^2}$

$t = 0.38\ seg$