

2/76

$t = 0$: package dropped at A

t_B, t_C : times package at point B, C

From A to B : $y = \frac{1}{2} g t_B^2$ (1)

From B to C : $(400 - y) = 6(t_C - t_B)$ (2)

Also, $t_C = 37$ sec. Solve (1) & (2) to

obtain $t_B = 3.52$ sec, $y = 199.1$ ft

$$L = 180 \left(\frac{5280}{3600} \right) (3.52) = \underline{928 \text{ ft}}$$

