

2/14	$B \text{ to } C; \quad t = 10/2 = 5 \text{ s}$ $v = v_i + at; \quad 0 = v_i - 9.8(5), \quad v_i = 49.0 \text{ m/s}$ $v^2 = v_i^2 + 2as; \quad 0 = (49.0)^2 + 2(-9.8)h_2$ $h_2 = 122.6 \text{ m}$
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> C \vdots h_2 \vdots B \vdots h_1 \vdots A </div> <div style="display: flex; flex-direction: column; align-items: center;"> $\uparrow v_i$ $\uparrow a = 40g$ </div> </div>	$A \text{ to } B; \quad v^2 = v_0^2 + 2as;$ $(49.0)^2 = 0 + 2(40)(9.8)h_1$ $h_1 = 3.07 \text{ m}$ $h = h_1 + h_2 = \underline{125.7 \text{ m}}$