

Tougher sheet #4

$v_T = 10 \frac{m}{s}$

$t_T = t_c$

$v_c = 0 \frac{m}{s}$

$d_T = d_c$

$d_T = v_T t$

$d_c = v_c t + \frac{1}{2} a t^2$

$d_c = \frac{1}{2} a t^2$

$d_T = d_c$ (constraint)

$v_T t = \frac{1}{2} a t^2$

$v_T = \frac{1}{2} (2.00 \frac{m}{s^2}) t$

$10 \frac{m}{s} = \frac{1}{2} (2.00 \frac{m}{s^2}) t$

$10 s = t$

$v_{fc} = ?$

$v_{fc} > v_T$

Mar 15-11:37 AM