The key to this problem is setting $d_{super} = d_{student}$ & $t_{super} = t_{student} - 5s$

$t_{super} + 5s = t_{student}$

$d = v_0 t + \frac{1}{2} a t^2 \Rightarrow v_{0_{su}} t_{su} + \frac{1}{2} a t_{su}^2 = \cancel{v_{0_{st}}^{0}} t_{st} + \frac{1}{2} a t_{st}^2$

$v_{0_{su}} = \frac{\frac{1}{2} a (t_{st}^2 - t_{su}^2)}{t_{su}}$

$d_{st} = \cancel{v_{0_{st}}^{0}} t_{st} + \frac{1}{2} a t_{st}^2 \Rightarrow t_{st} = \sqrt{\frac{2d}{a}} = \sqrt{\frac{2(300m)}{-9.8 m/s^2}} = 7.83s$

$t_{su} = 7.83s - 5s$

$t_{su} = 2.83s$

$v_{0_{su}} = \frac{\frac{1}{2}(-9.8 m/s^2)((7.83s)^2 - (2.83s)^2)}{2.83s} = \boxed{-92.3 m/s}$