

Question #15378

The speed for an accelerated motion is $v(t) = v_0 + at$. In our case, the acceleration $a = -0.5 \frac{m}{s^2}$

, and $v_0 = 2 \frac{m}{s}$, $t = 2s$. Hence, the velocity after two seconds is

$$v = 2 \frac{m}{s} - 0.5 \frac{m}{s^2} \cdot 2s = 2 \frac{m}{s} - 1 \frac{m}{s} = 1 \frac{m}{s}.$$