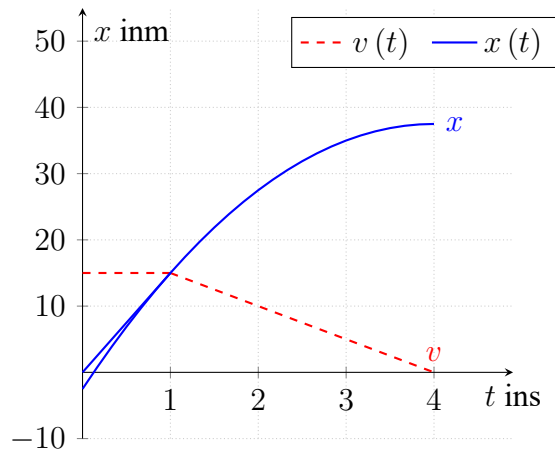


## 12. Bremsvorgang an einer Ampel



a)

$$v(t) = \begin{cases} 15 & \text{für } 0 \leq t < 1, \\ -5t + 20 & \text{für } 1 \leq t \leq 4. \end{cases}$$

b)

$$x(t) = \begin{cases} 15t & \text{für } 0 \leq t < 1, \\ -2.5t^2 + 20t - 2.5 & \text{für } 1 \leq t \leq 4. \end{cases}$$

c)  $t_2 = \underline{\underline{4\text{s}}}$ ;  $x_2 = \underline{\underline{37.5\text{m}}}$