This class requires research. Assume:

1. only gravity
2. gravity acts "down"
3. "gravity" $\Rightarrow$ accel. $\vec{g}$

$\vec{V}(t) = \vec{V}_x \hat{x} + \vec{V}_y(t) \hat{y}$

$V_y(t)$ is calculated in p.s. 2 problem #2.
car hit gas for 10s.
- coast for 15s.
- brake for 5s.

\[ \frac{dV_x}{dt} + \frac{a_x}{a} = 0 \]

\[ \text{Ax} = \text{slope of diagram!} \]

\[ \text{Ax} = \frac{V_x}{t} \]

150 m
50 m
\[ x = \int_0^t S v \, dt \]  
(anti-derivative)