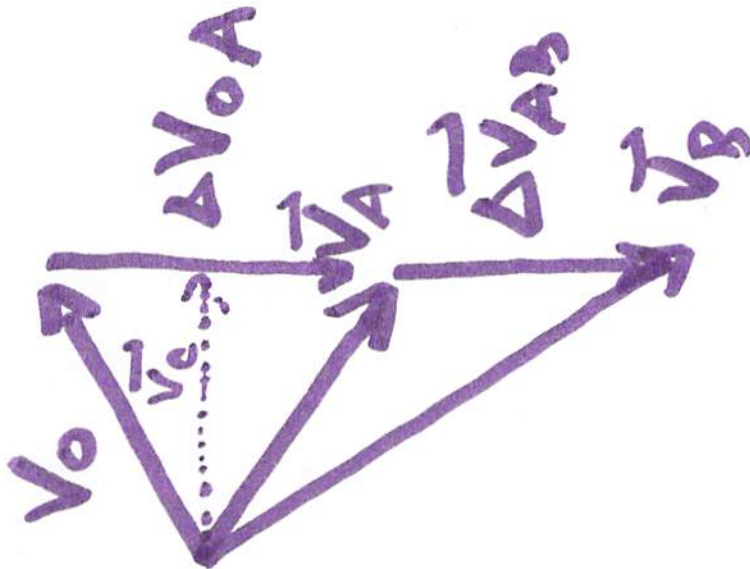


this class requires research assume



$\vec{g} \downarrow$

- 1. only gravity
- 2. gravity acts "down"
- 3. "gravity" \leftrightarrow accel.

\vec{g}

$\vec{v}(t) = v_x \hat{x} + v_y(t) \hat{y}$

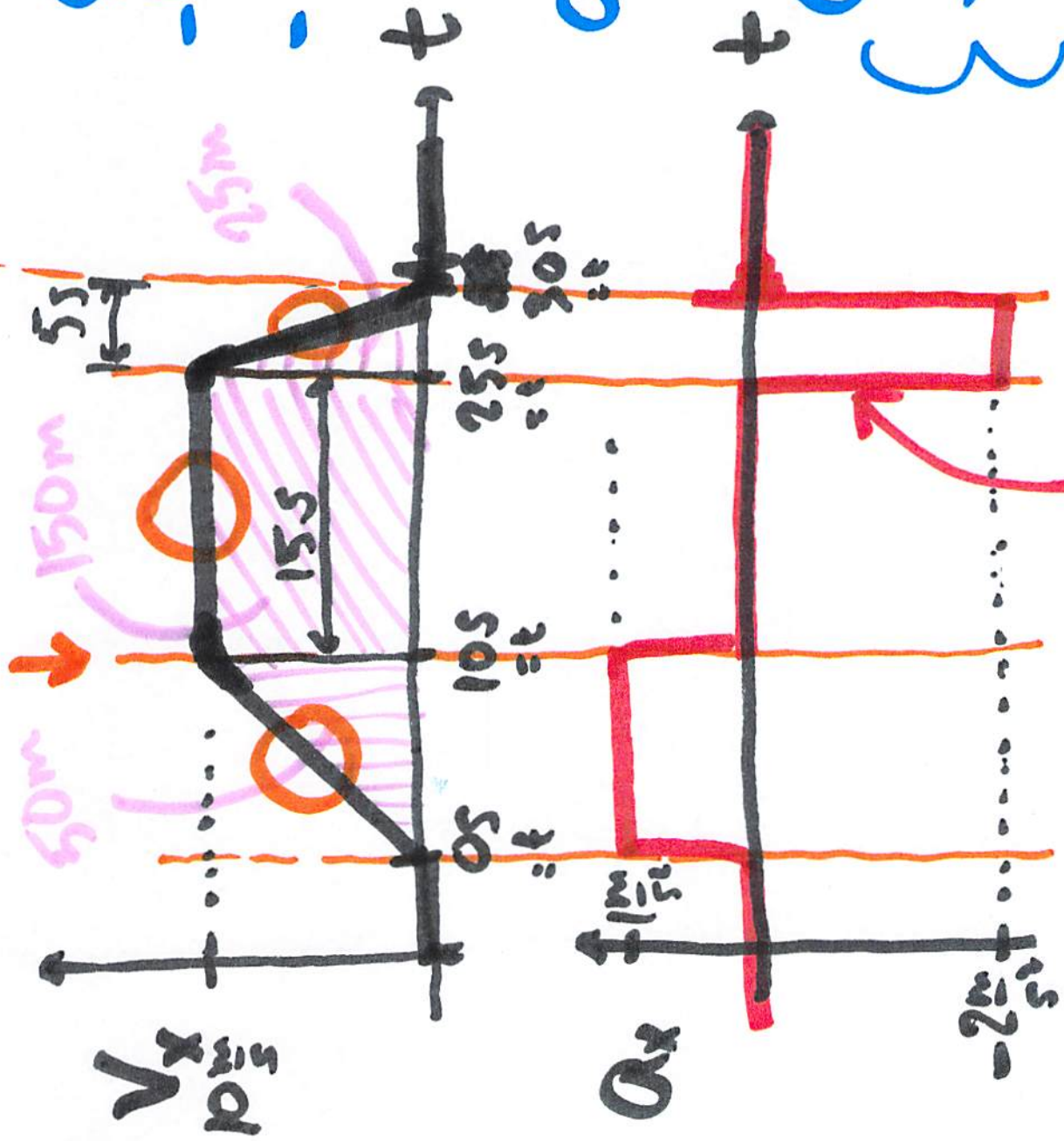
unit vectors

$v_y(t)$ is calculated in P.S. 2 problem #2.

- Car
- hit gas for 10s.
 - coast for 15s
 - brake for 5s.

$$a_x = \frac{dv_x}{dt}$$

$a_x = \text{slope of the } v_x \text{ vs } t \text{ diagram!}$



high jerk.

$$x = \int_0^t v_x dt'$$

(anti-derivative)

