3. The area of a small slab is \( \Delta x \cdot \Delta t = \Delta x \).

Thus, the total area is

\[
\sum \Delta x \Delta t = \sum \Delta x = x
\]

\( = \text{distance traveled} \)

4. The slope is

\[
\text{slope} = \frac{\Delta V}{\Delta t} = \vec{a}
\]

Thus, slope at \( t = t_0 \) gives acceleration at the time \( t = t_0 \).
Do the same thing as \( 3 \). Choose a small slab.

\[ \Delta \text{Area} = \frac{\Delta x}{x} \Delta t = \Delta v_x \]

Thus, the total area measures the change in speed from time \( t_1 \) to time \( t_2 \).

Slope = \( \frac{\Delta x}{\Delta t} = v_x \) at the time \( t = t_0 \).