



$$\textcircled{1} \quad v = \frac{\Delta x}{\Delta t}$$

$$\textcircled{2} \quad a = \frac{\Delta v}{\Delta t}$$

~~Getting position from acceleration~~

① Getting position from velocity.

$$v = \frac{\Delta x}{\Delta t} \quad \Delta x = v \Delta t$$

* when $a=0$ *
no half ($\frac{1}{2}$)

velocity just ~~becomes~~ straight line

② Getting position from acceleration

$$a = \frac{\Delta v}{\Delta t} \quad \text{Recall} \quad \Delta v = \frac{\Delta x}{\Delta t}$$

$$a = \frac{\Delta x}{\Delta t^2} \Rightarrow \Delta x = a \Delta t^2 \quad \text{look at velocity graph}$$

~~at~~ at $t=0$ to $t=4$

$$\Delta x = \frac{a(4-0)^2}{2} \quad \text{half come from area } \frac{1}{2}bh.$$