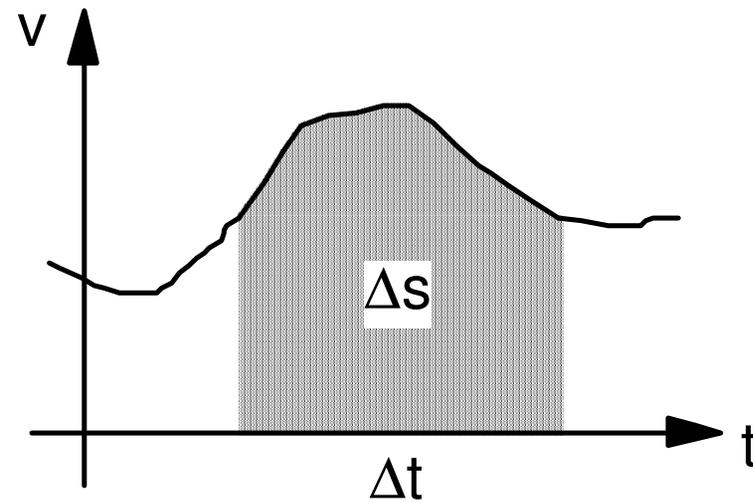
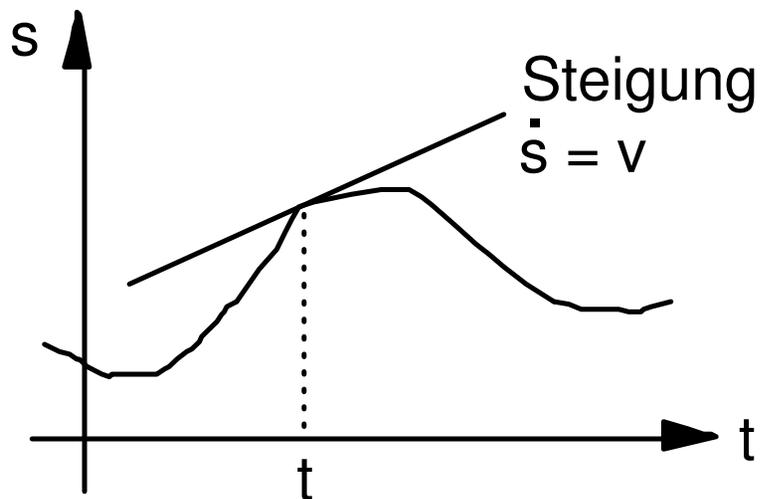


## Ort $s$ $\leftrightarrow$ Geschwindigkeit $v$

$$v_{\text{mittel}} = \frac{\Delta s}{\Delta t}$$

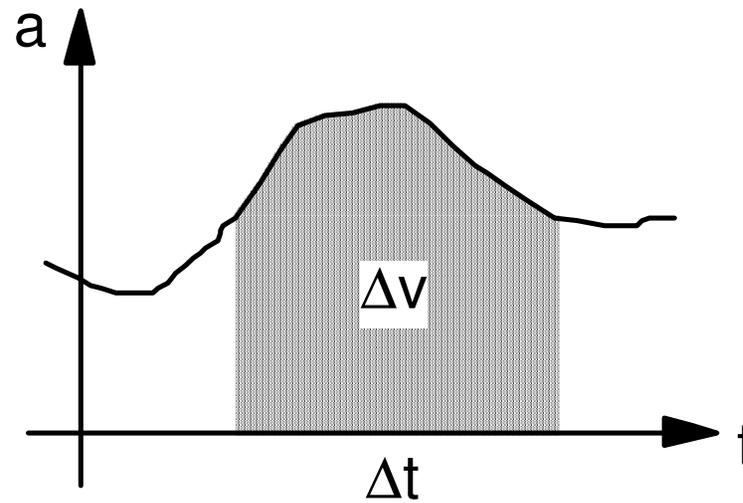
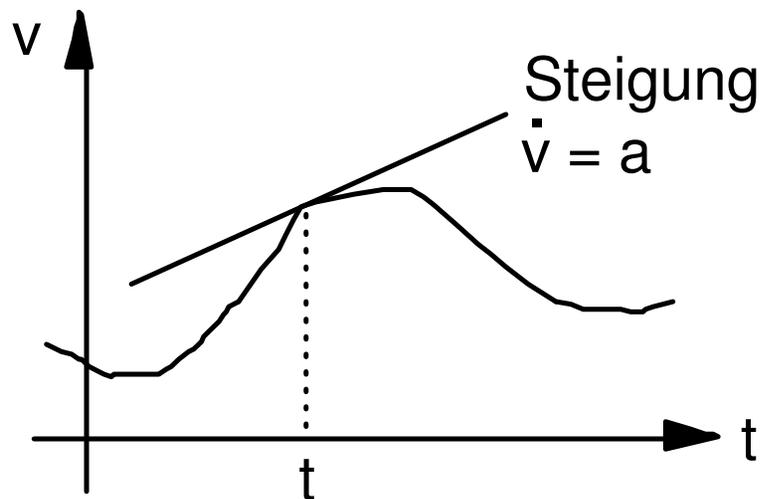
$$v = \dot{s}$$



## Geschwindigkeit $v \leftrightarrow$ Beschleunigung $a$

$$a_{\text{mittel}} = \frac{\Delta v}{\Delta t}$$

$$a = \dot{v}$$



## Gleichmässig beschleunigte Bewegung

Annahmen:  $a = \text{konst.}$

$$s = 0 \text{ bei } t = 0$$

$$v = v_0 + a t$$

$$s = v_0 t + \frac{1}{2} a t^2$$