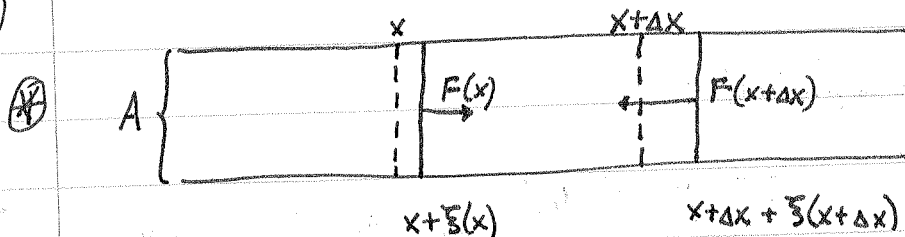


50B



$$F(x + \Delta x) - F(x) = \Delta m \cdot a = \rho \underbrace{\Delta x}_{\Delta V} A \frac{\partial^2 \xi}{\partial t^2}$$

$$\Rightarrow \frac{F(x + \Delta x)}{A} - \frac{F(x)}{A} = \rho \Delta x \frac{\partial^2 \xi}{\partial t^2} \rightarrow 0 \text{ n r } \Delta x \rightarrow 0$$

$$\Rightarrow \frac{F}{A} \text{ kontinuert}$$

Fra for; Hookes lov: $\frac{F}{A} = -B \cdot \frac{\Delta L}{L} = -B \frac{\xi(x + \Delta x) - \xi(x)}{\Delta x} \xrightarrow{\Delta x \rightarrow 0} -B \frac{\partial \xi}{\partial x}$

$\uparrow$ bulkmodulen

$$\Rightarrow B \frac{\partial \xi}{\partial x} \text{ m  v re kontinuert i gr sefl ten, i tillegg til } \xi \text{ selv, selvsagt}$$