Derive material derivative

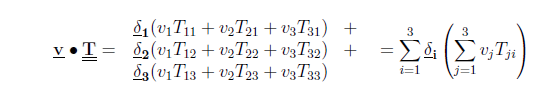
From chain rule of

Pg 162 fluids example 4.4

Ns eqn

ma=F

\rho\frac{D\mathbf{v}}{D t} = \nabla \cdot \boldsymbol{\sigma} + \mathbf{f}

\\hpc1.engr.uconn.edu\mnp04001\Picture 2.png

Stress tensor

Pressure gradient, and body force

Look at navier stokes in kundu fluids