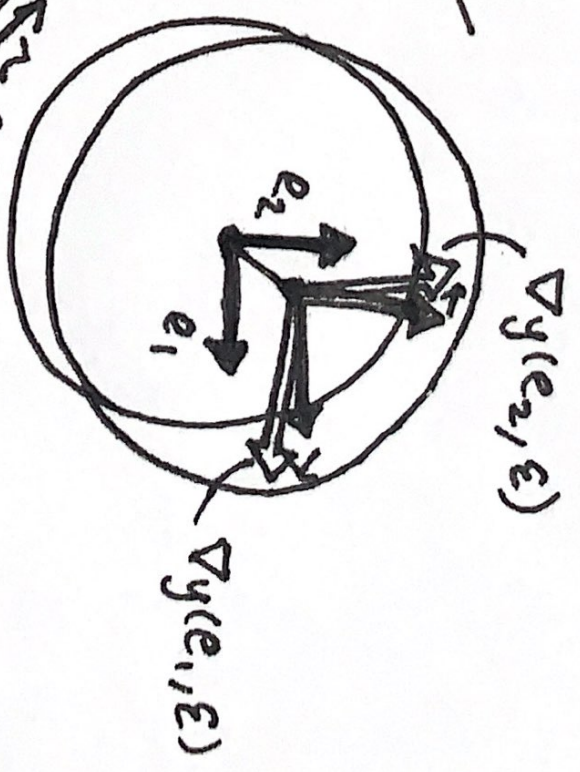


$$M = y(M, 0)$$



The velocity gradient is integrated to get the deformation gradient.