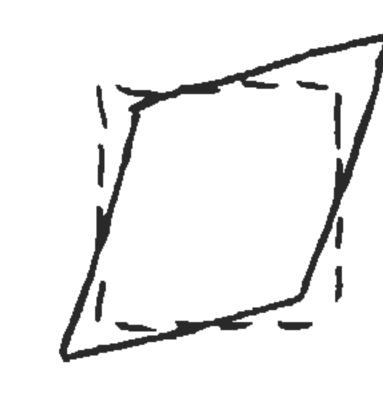
a) 
$$u = Cy$$
  $y = 0$ 

$$S_{=} = \frac{3x}{3x} - \frac{3y}{3u} = -C$$

or, 
$$\omega_{z} = \frac{1}{2}\xi_{z} = -\frac{1}{2}C$$

$$\mathcal{E}_{xy} = \frac{1}{2} \left( \frac{\partial u}{\partial y} + \frac{\partial v}{\partial x} \right) = \frac{1}{2} \mathcal{C}$$

b) Simple shearing motion, which is a 50-50 combination of rotation and shear



$$= -\frac{1}{2} \left( \frac{\partial v}{\partial x} - \frac{\partial u}{\partial y} \right) + \frac{1}{2} \left( \frac{\partial u}{\partial y} + \frac{\partial v}{\partial x} \right)$$

$$= -\left(-\frac{1}{2}c\right) + \frac{1}{2}c$$