

[ndm - 0010]

situations 2D.

$$a) \quad \begin{aligned} \tau_{xx} &= \tau_{xy} = \tau_{yx} = 0 \\ \tau_{yy} &= \frac{-F}{ea} \end{aligned}$$

$$\Sigma = \begin{pmatrix} 0 & 0 \\ 0 & \frac{-F}{ea} \end{pmatrix}$$

$$b) \quad \begin{aligned} \tau_{xx} &= \frac{fa}{ea} = \frac{f}{e} \\ \tau_{yy} &= \frac{-F}{ea} \\ \tau_{xy} &= \tau_{yx} = 0 \end{aligned}$$

$$\Sigma = \begin{pmatrix} \frac{f}{e} & 0 \\ 0 & \frac{-F}{ea} \end{pmatrix}$$

$$c) \quad \begin{aligned} \tau_{xx} &= \tau_{yy} = 0 \\ \tau_{xy} &= \frac{q \cdot ea}{ea} = q \\ \tau_{yx} &= \frac{q \cdot ea}{ea} = q \end{aligned}$$

$$\Sigma = \begin{pmatrix} 0 & q \\ q & 0 \end{pmatrix}$$

$$d) \quad \begin{aligned} \tau_{xx} &= 0 \\ \tau_{yy} &= -\frac{F}{ea} \\ \tau_{xy} &= \frac{q \cdot ea}{ea} = q \\ \tau_{yx} &= q \end{aligned}$$

$$\Sigma = \begin{pmatrix} 0 & q \\ q & \frac{-F}{ea} \end{pmatrix}$$