

**Problem M14**

For each of the states of plane stress shown acting on the differential elements drawn below do the following:

- 1) Draw a Mohr's circle describing the stress state.
- 2) Determine the principal stresses and the maximum shear stress
- 3) Calculate the angle from the  $x_1$  direction as shown to the more tensile principal stress direction. Note whether the angle is clockwise or counterclockwise.

