Name:	Roll no.

 $\underline{\text{Department of Aerospace Engineering, Indian Institute of Technology, Madras.}}$ 

## AS 2010: Basic strength of materials. Quiz 6

1. Find the principal stresses and their directions if the stress at a point is the sum of the two stress states shown:



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2. At a point in a body in plane stress, the shear stress state is as sketched. Also, the principal stresses are 20 MPa and -45 MPa. Find  $\sigma_{xx}$ , and  $\sigma_{yy}$  and mark them in the figure below.

