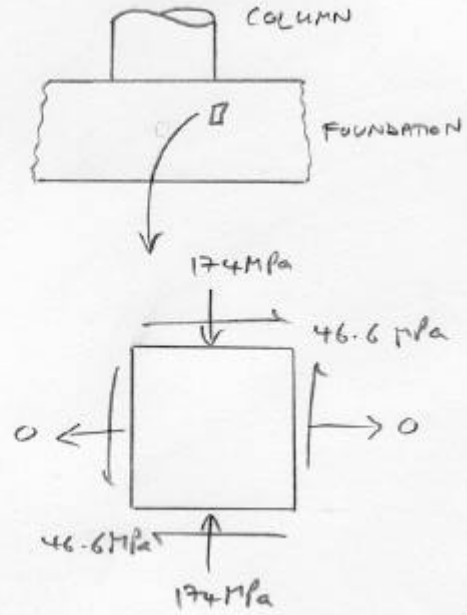
(3)



$\sigma_x = 0$

$\sigma_y = -174$ MPa

$\tau = 46.6$ MPa

PLOT THE POINTS $X(0, -46.6)$ & $Y(-174, 46.6)$ AND DRAW MOHR'S CIRCLE (CENTRE, A) – SEE CHART Q3.

THE PRINCIPAL STRESSES ARE REPRESENTED BY POINTS ① ($\sigma = 11.7$ MPa) & ② ($\sigma = -185$ MPa). THE PLANES ARE GIVEN BY HALF THE ANGLES OAX AND OAY – i.e. $\frac{28^\circ}{2} = \underline{\underline{14^\circ}}$

AND $\frac{208^\circ}{2} = \underline{\underline{104^\circ}}$