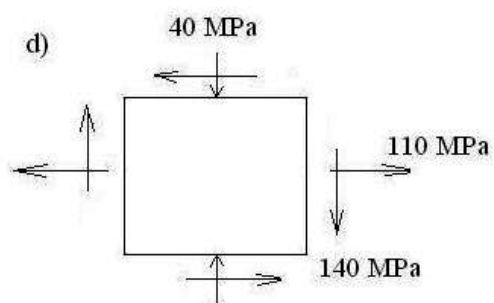
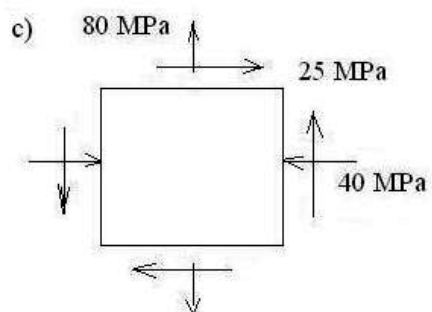
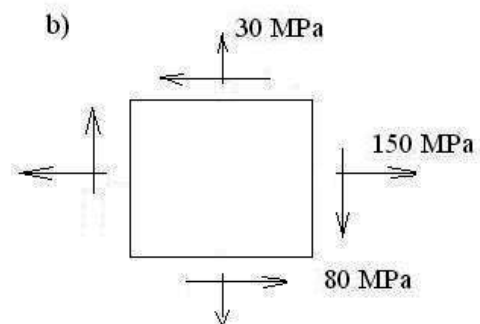
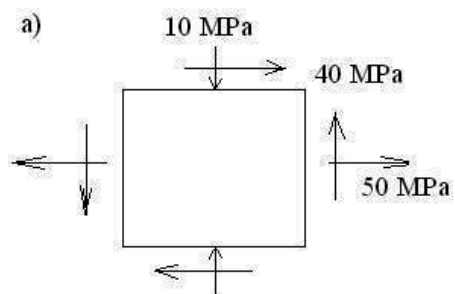


Lista 11 – Círculo de Mohr

- 1) Para cada um dos estados de tensão abaixo, esboce o círculo de Mohr, calcule as tensões principais e os ângulos.



Respostas

a)

$T_x = 50$
 $T_y = -10$
 $T_{xy} = 40$

$a = 20$

$R = 50$

$T_{max} = 70$

$T_{min} = -30$

$Teta = 26,6 \text{ graus}$

b)

$T_x = 150$
 $T_y = 30$
 $T_{xy} = -80$

$a = 90$

$R = 100$

$T_{max} = 190$

$T_{min} = -10$

$Teta = -26,6 \text{ graus}$

c)

$T_x = -40$
 $T_y = 80$
 $T_{xy} = 25$

$a = 20$

$R = 65$

$T_{max} = 85$

$T_{min} = -45$

$Teta = -11,3 \text{ graus}$

d)

$T_x = 110$
 $T_y = -40$
 $T_{xy} = -140$

$a = 35$

$R = 158,8$

$T_{max} = 193,8$

$T_{min} = -124$

$Teta = -30,9 \text{ graus}$

