mm

5 points): The bar OAB is loaded with the following forces:
$F_1=600$ N, $F_2=100$ N, $F_3=500$ N. If the bar is made of AISI 1095
Q&T (Tempering Temperature $=315$ °C) steel.
- Calculate the principal stresses

y

80 mm

18 mm

180 mm

30mm

O

C

12 mm dia

4 mm

14.5 mm
dia

12mm

F₂

Z

r=2.1mm

30 mm

B

F₁

180 mm

250 J

600

F₃ 30°

180 mm

433