Determine the distribution of stress (normal, shear) in the most loaded cross section and the angle of twist at "B" point. The material of the beam is characterized by the shear modulus $G = 80$ GPa.

a) Draw the distribution diagrams of internal forces
b) Draw the distribution of normal and shear stresses in the most loaded cross section.

The checked values are:

- Minimum and maximum normal stress $(\sigma_{min}, \sigma_{max})$ [kPa]
- Maximum shear stress [kPa]
- Angle of twist at "B" point [rad]

A

Cross section:

$F_1 = 0.7c$ kN

$d = 0.02$ m

$l_1 = 0.3a$ m

B

$F_2 = 0.5b$ kN

$l_2 = 0.1b$ m