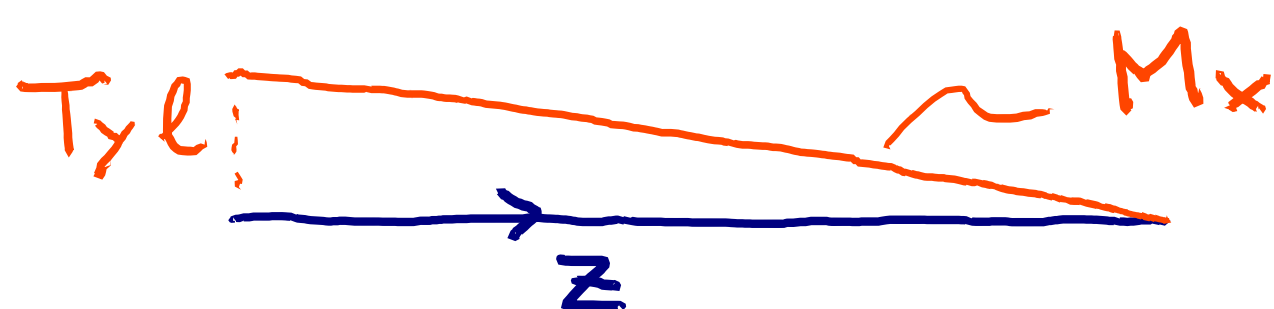
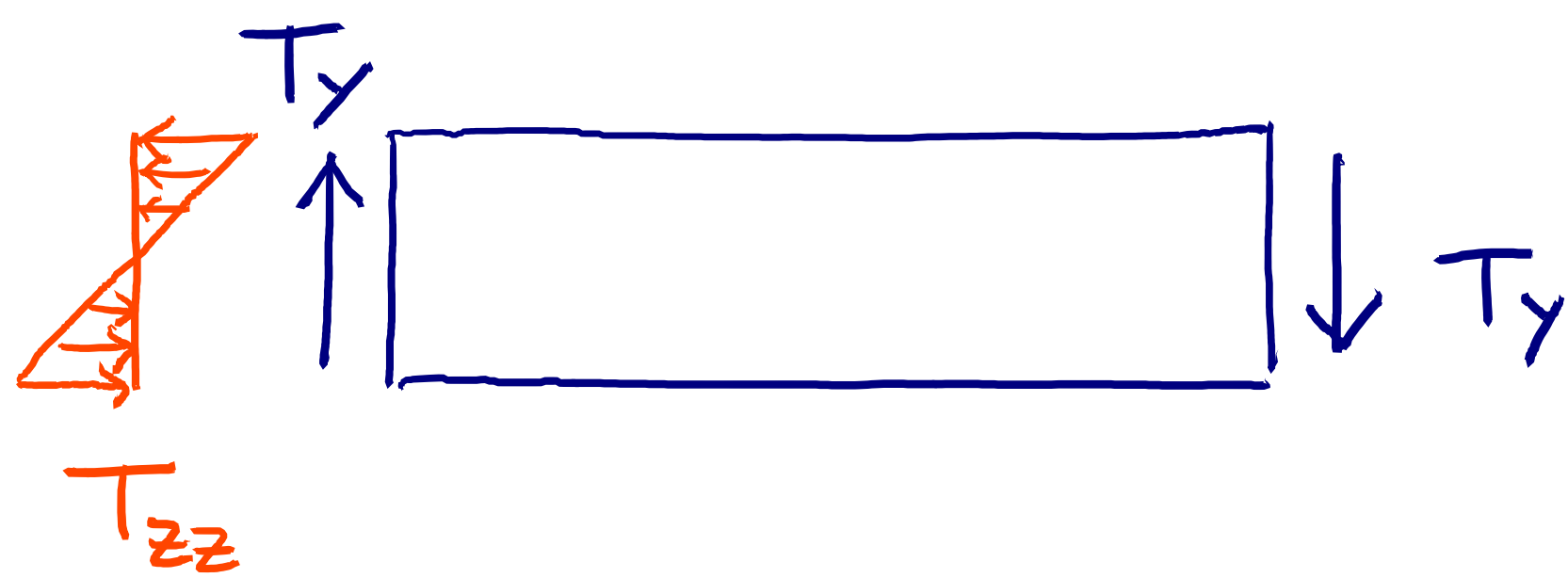
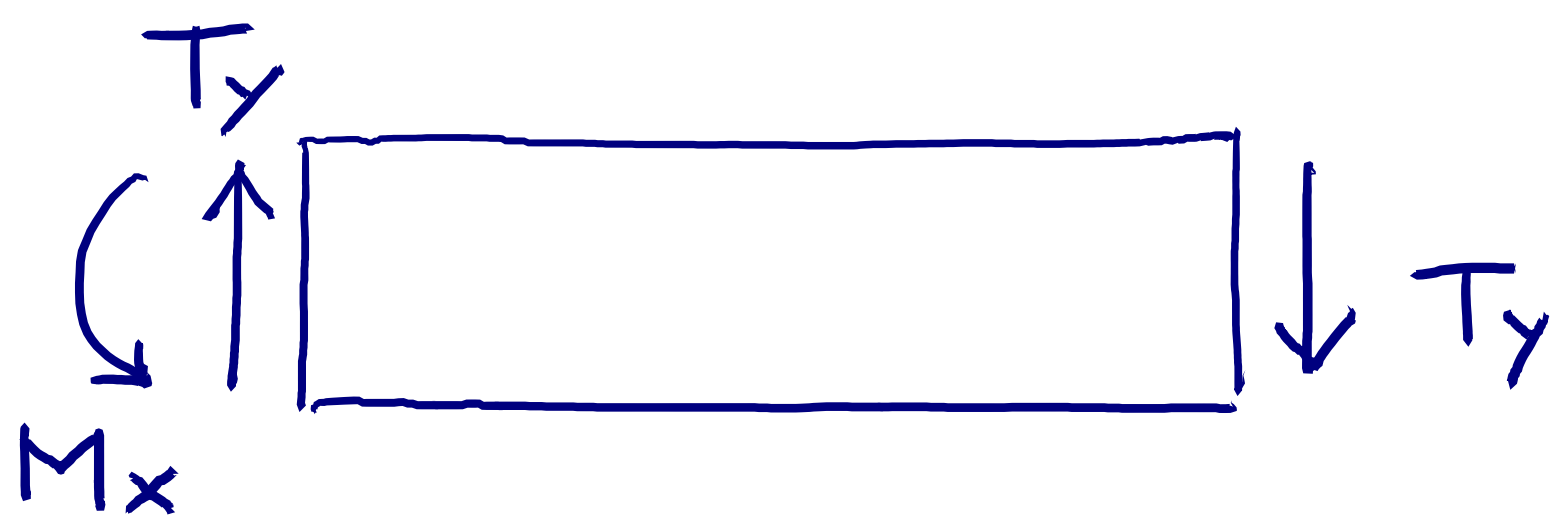
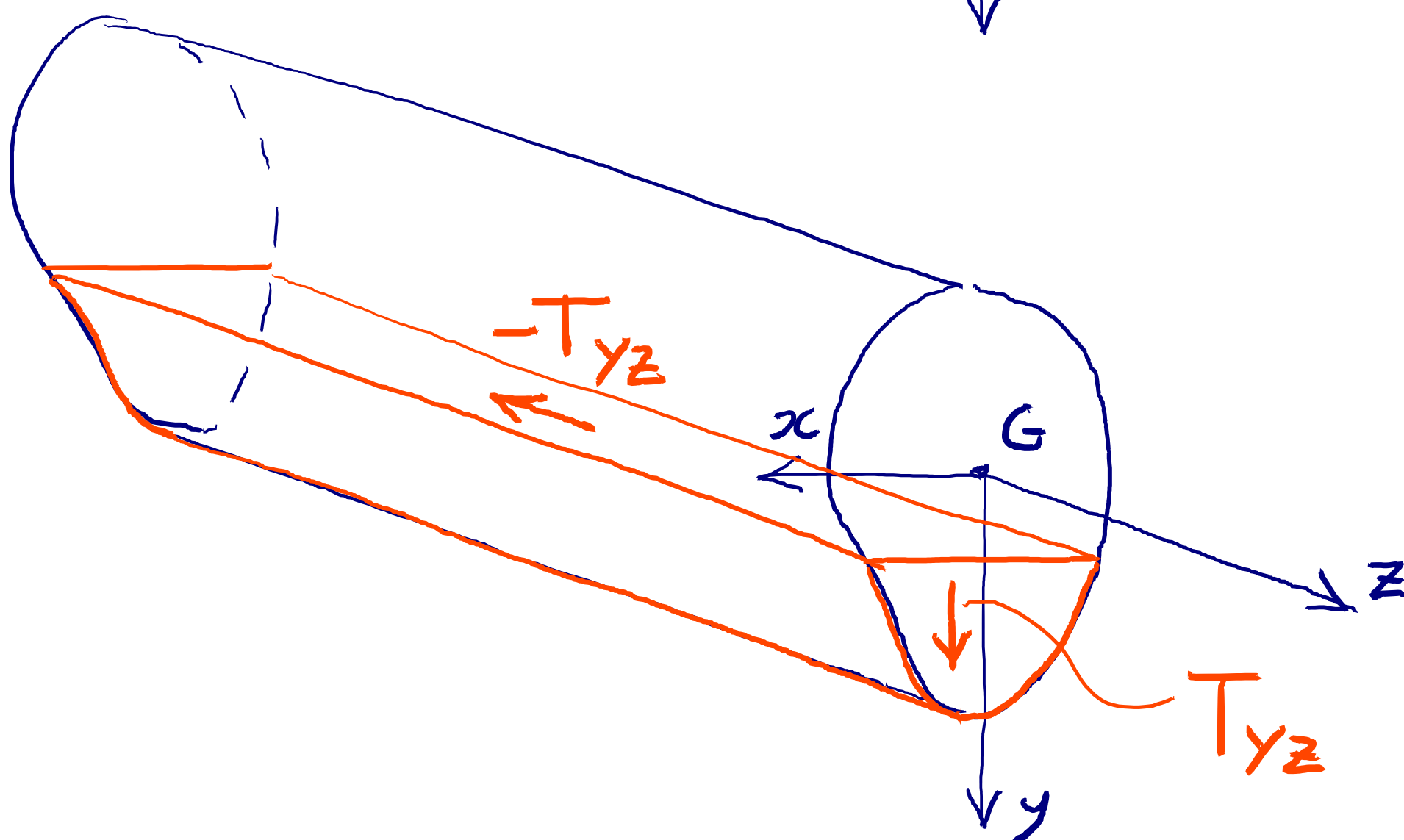
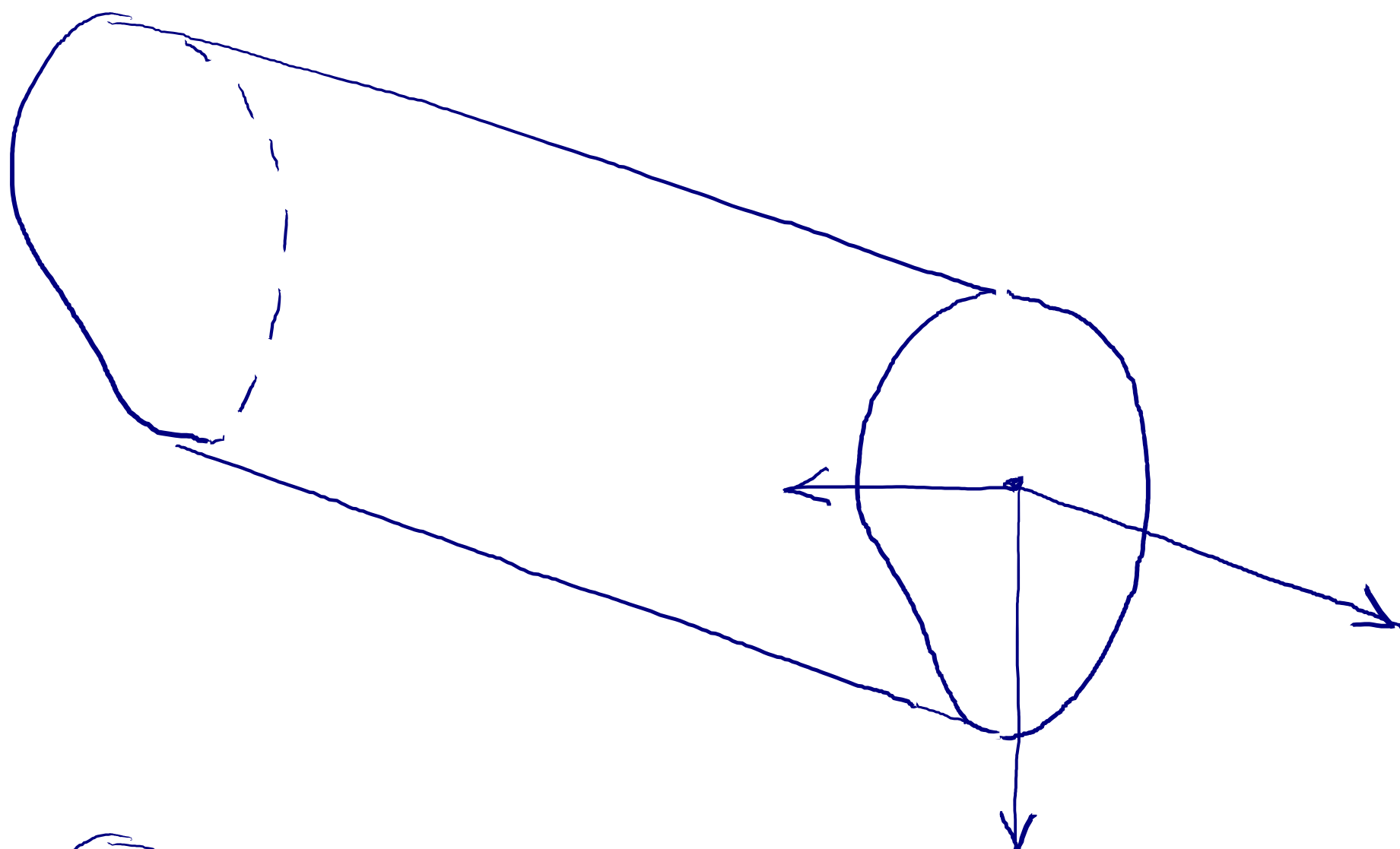
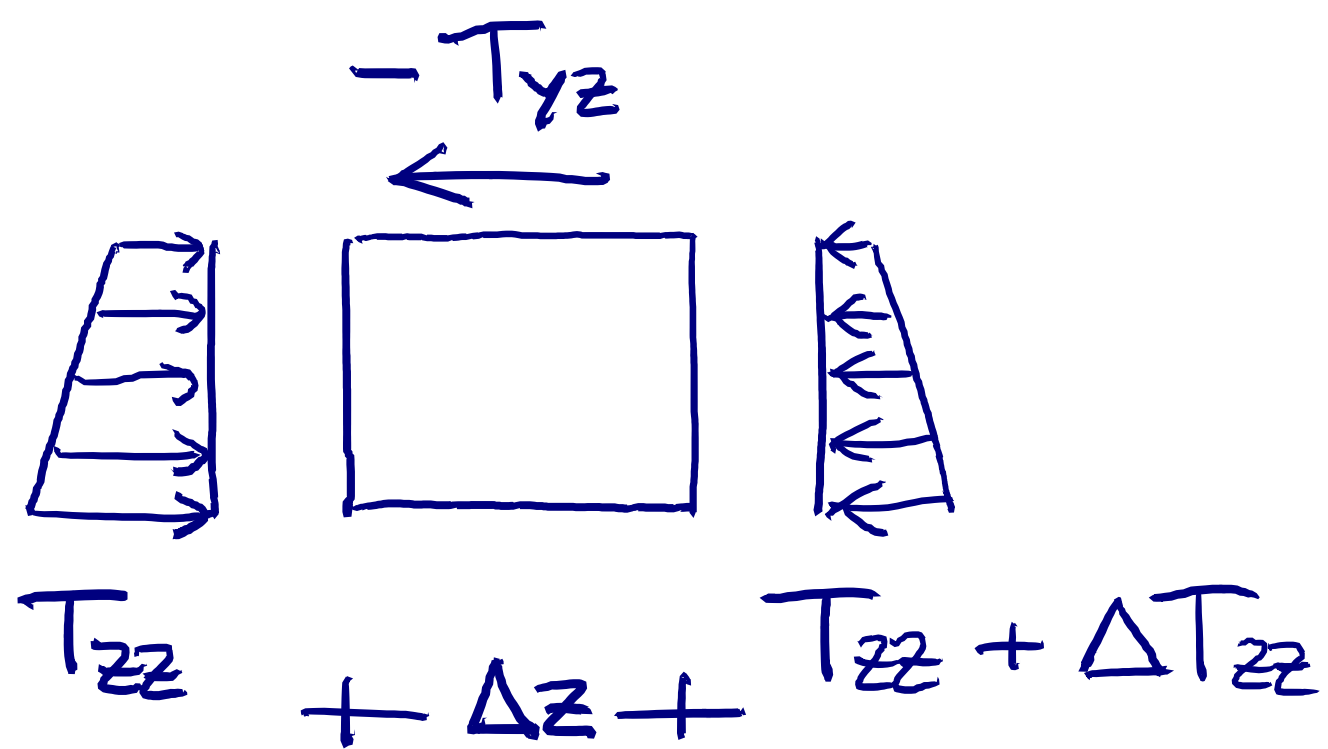
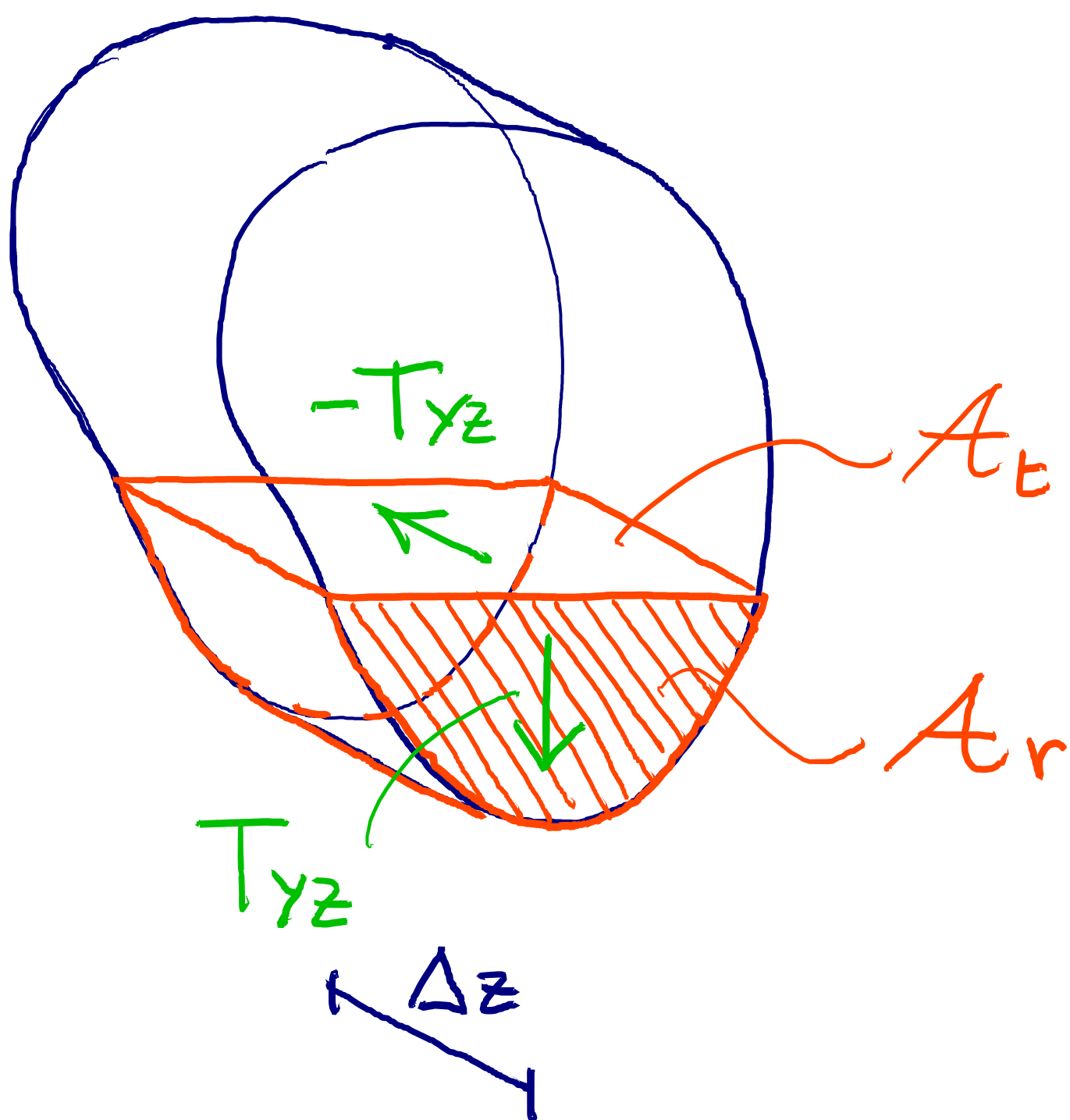
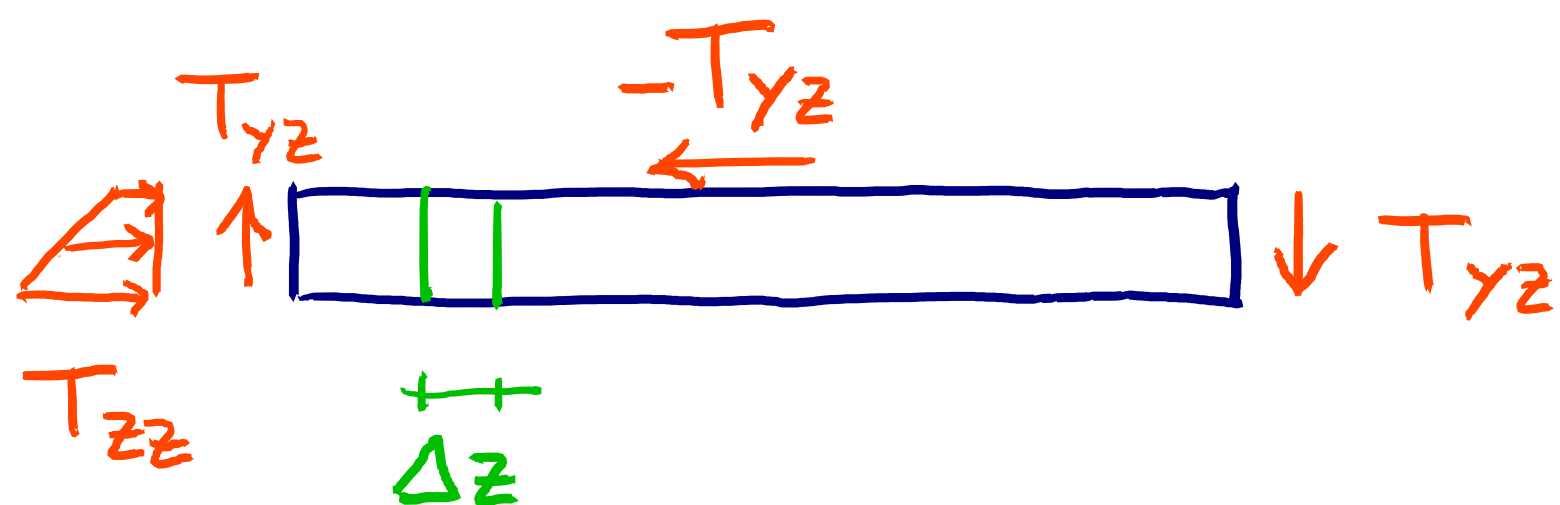
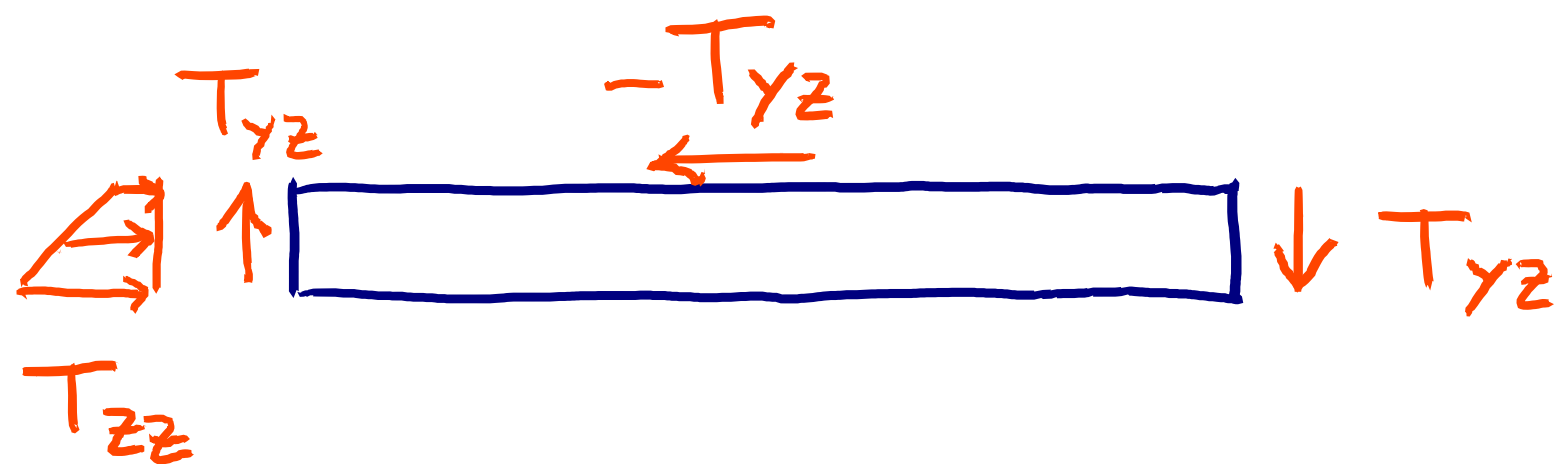
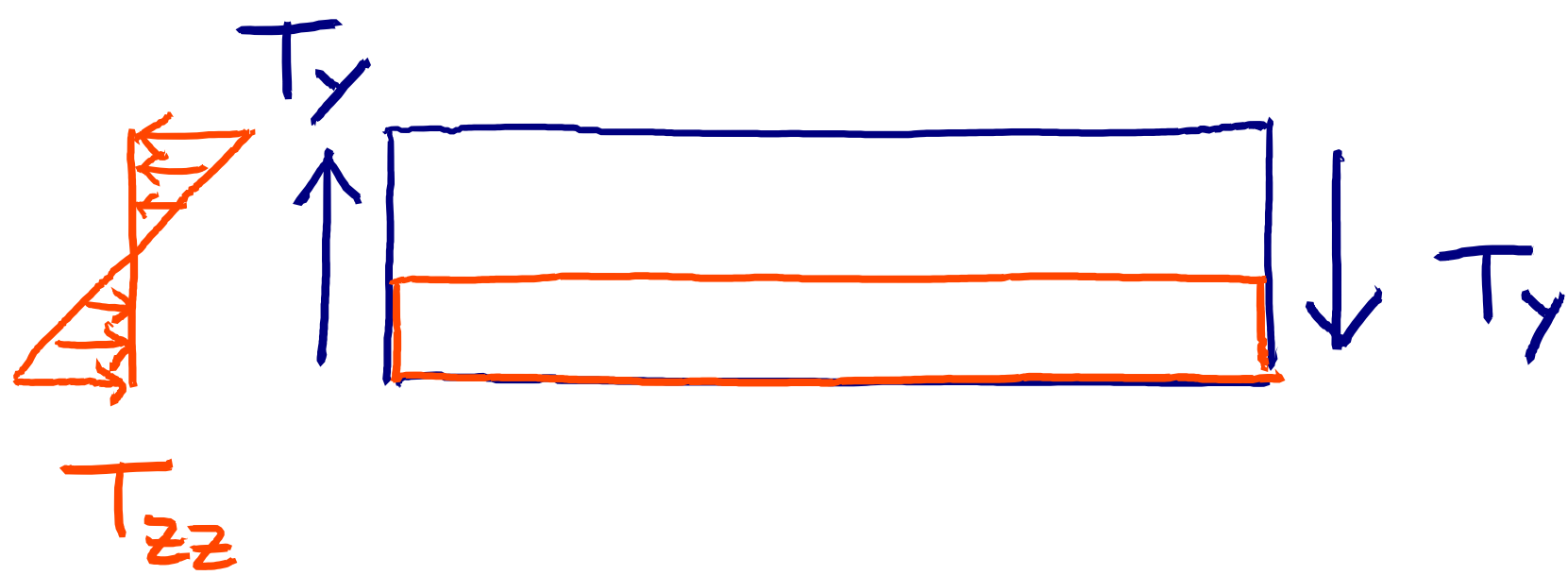






$$\int_{A_r} T_{zz} + \Delta T_{zz} - T_{zz} + \int_{A_t} (-T_{yz}) dx dz = 0$$

$$T_{zz} = \frac{M_x}{J_x} y$$

$$\int_{A_r} \frac{\Delta M_x}{J_x} y - \Delta z \int_{b_r} T_{yz} dx$$

$$M_x = -T_y(l - z), \quad \Delta M_x = T_y \Delta z$$

$$\Delta z \left(\int_{A_r} \frac{T_y}{J_x} y - b_r \overline{T_{yz}} \right) = 0$$

momento statico
di A_r rispetto
all'asse x

$$(S_x)_r := \int_{A_r} y dx dy$$

media
sulla corda

$$\overline{T_{yz}} := \frac{1}{b_r} \int_{b_r} T_{yz} dx$$

$$\frac{T_y}{J_x} (S_x)_r - b_r \overline{T_{yz}} = 0$$

$$\Rightarrow \overline{T_{yz}} = \frac{T_y (S_x)_r}{J_x b_r} \approx T_{yz}$$