Stress Formula (Summary)

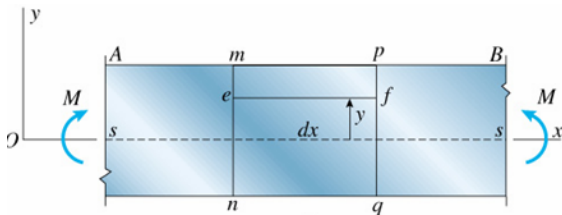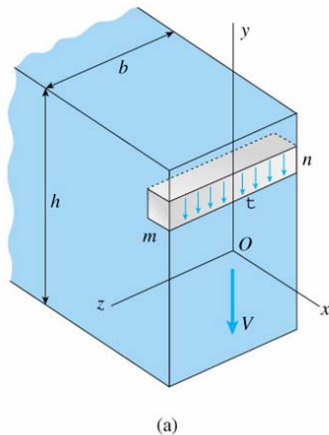| Loading Condition	Stress Formula	Stress Distribution
Axial	$\sigma = \dfrac{P}{A}$	
Torsion	$\tau = \dfrac{T\rho}{I_P}$	
Bending	$\sigma_x = -\dfrac{My}{I}$	
Shear Force	$\tau = \left(\dfrac{VQ}{Ib}\right)$	
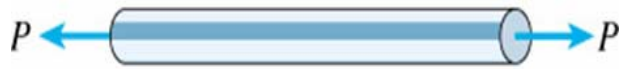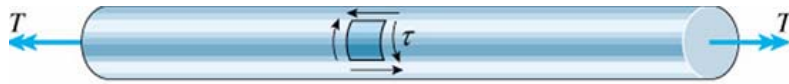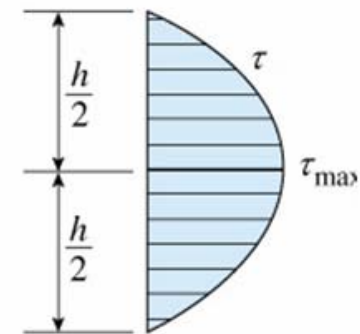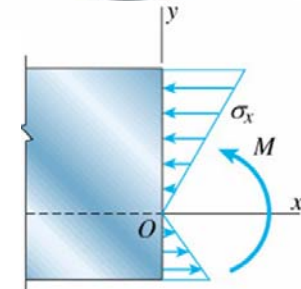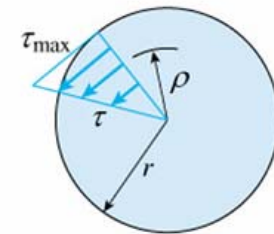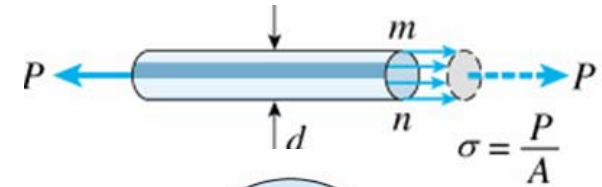
Cylindrical Pressure Vessel
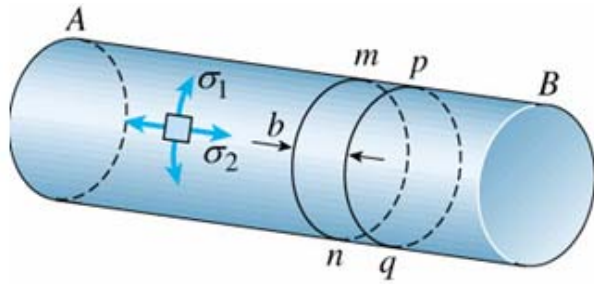
(a)

$$\sigma_1 = \frac{pr}{t} \qquad \sigma_2 = \frac{pr}{2t}$$
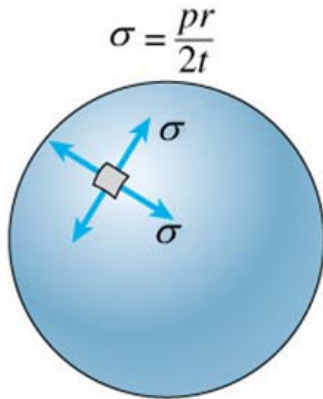
Spherical Pressure Vessel

$$\sigma = \frac{pr}{2t}$$

$$\sigma = \frac{pr}{2t}$$