

Forces and Stresses

Engineering Fluid Mechanics

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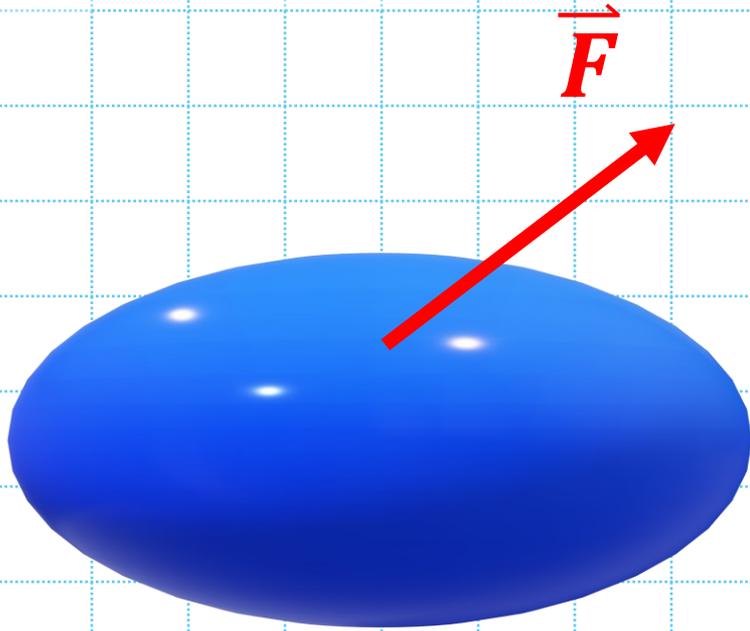
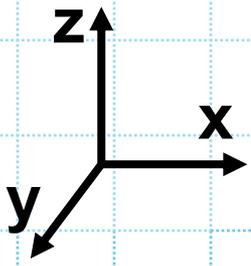


$$F = M * L / T^2 \quad \begin{array}{l} \diagup N \\ \diagdown \text{lbf} \end{array}$$

$$\sigma = \frac{F}{A} \quad \begin{array}{l} \diagup \frac{N}{m^2} - \text{Pascals} \\ \diagdown \frac{\text{lbf}}{ft^2} \rightarrow \text{psf} \\ \quad \quad \frac{\text{lbf}}{in^2} \rightarrow \text{psi} \end{array}$$

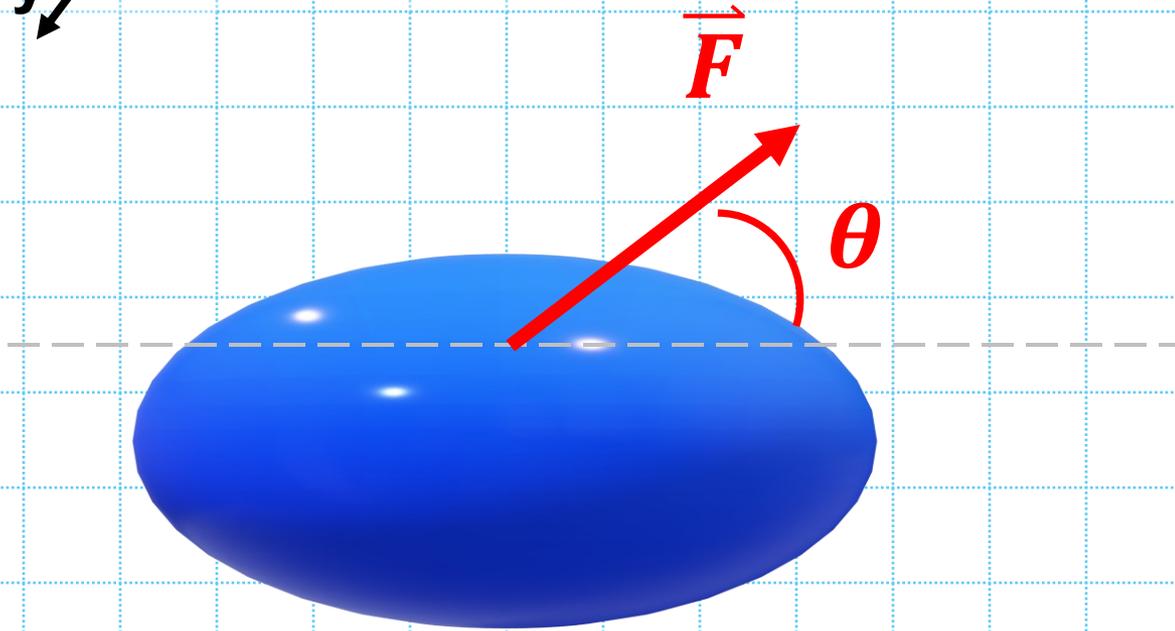
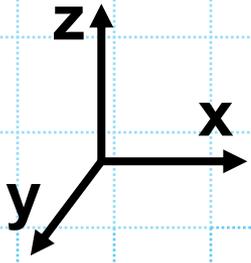
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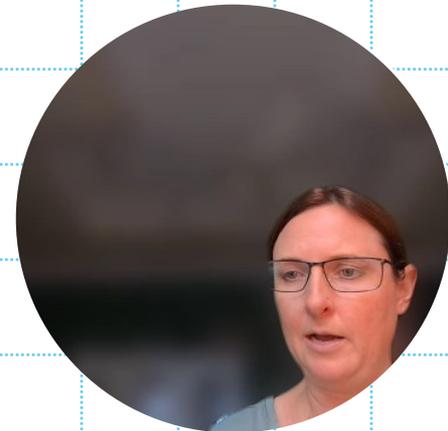


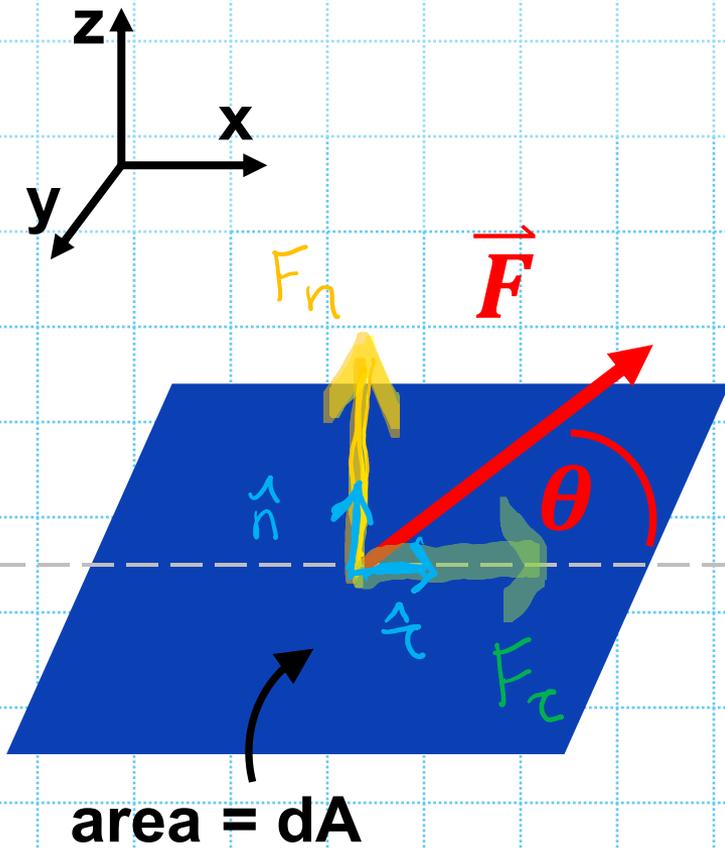
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$$\sigma = \frac{F_n}{dA} \rightarrow \text{PRESSURE}$$

$$\tau = \frac{F_t}{dA} \rightarrow \text{SHEAR STRESS}$$

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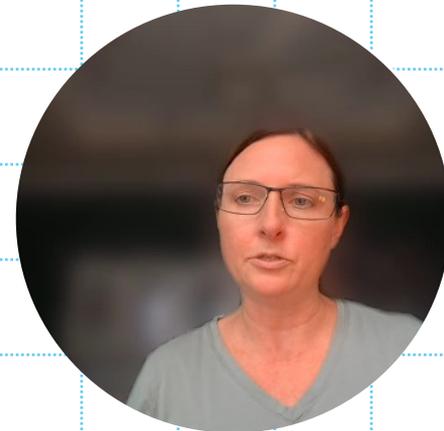


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