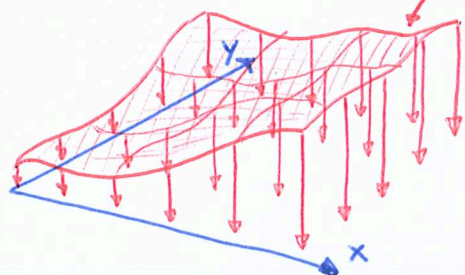


Distributed Forces

3 dimensional (3D):



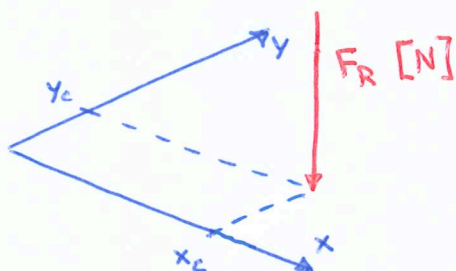
$p(x,y) [N/m^2] = [Pa]$ pressure

$$F_R = \int p(x,y) dA = \int d\forall = \forall$$

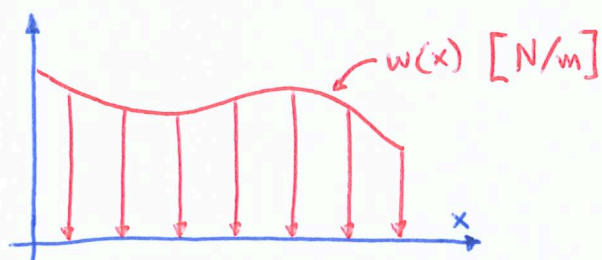
$$x_c = \frac{\int x d\forall}{\int d\forall}$$

$$y_c = \frac{\int y d\forall}{\int d\forall}$$

III

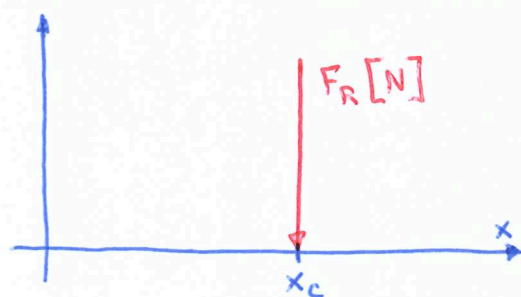


2 dimensional (2D):



$$F_R = \int w(x) dx = \int dA = A$$

III



$$x_c =$$