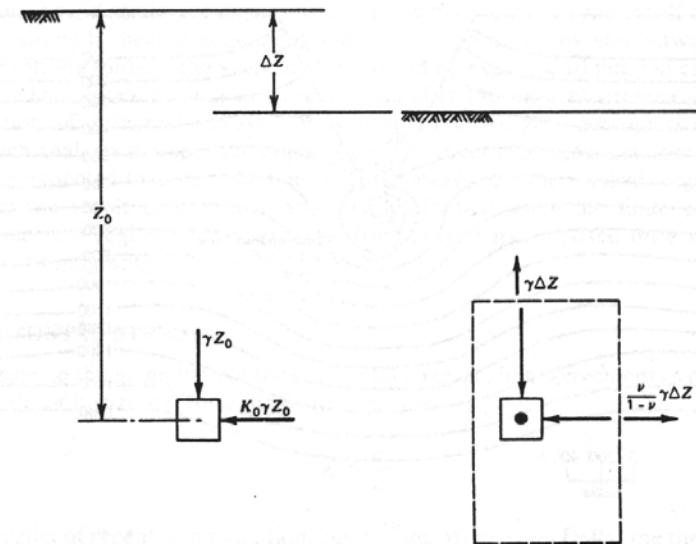
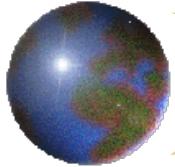


# HW1

- 某處地層沉積過程中原始靜止土壓力係數為0.8，伯松比為0.3，該處有20公尺的地層遭侵蝕作用而消失，請繪出該處現在靜止土壓力係數與深度之關係圖。





# HW2

- Prove

$$K_a = \frac{\gamma_s \cdot Z - q_u}{\gamma_s \cdot Z \cdot \tan^2(45^\circ + \phi/2)}$$

$$K_p = \tan^2(45^\circ + \phi/2) + \frac{q_u}{\gamma_s \cdot Z}$$

- If  $q_u=1\text{ MPa}$ ,  $\phi=30^\circ$   $\gamma_s=2.5 \text{ T/m}^3$ , please find the upper and lower bound of  $K_0$  when  $z=1\text{ km}$ ,  $2\text{ km}$ , and  $3\text{ km}$

