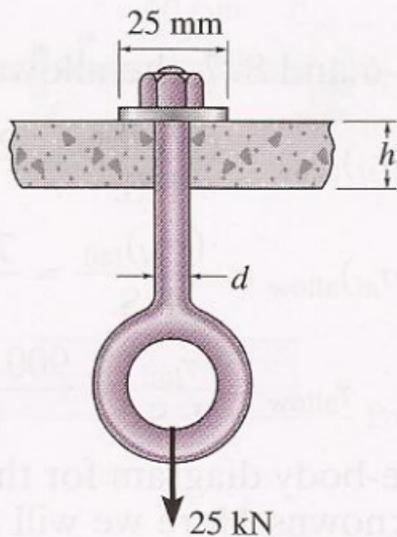


**8-37.** The eye bolt is used to support the load of 25 kN. Determine its diameter  $d$  to the nearest multiples of 2 mm and the required thickness  $h$  to the nearest multiples of 2 mm of the support so that the washer will not penetrate or shear through it. The allowable normal stress for the bolt is  $\sigma_{\text{allow}} = 150 \text{ MPa}$  and the allowable shear stress for the supporting material is  $\tau_{\text{allow}} = 35 \text{ MPa}$ .



**Prob. 8-37**