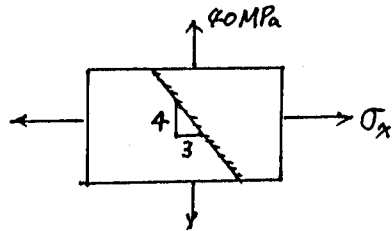
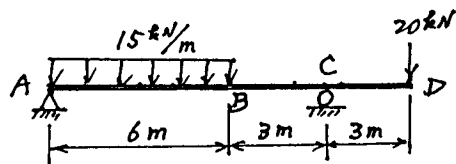


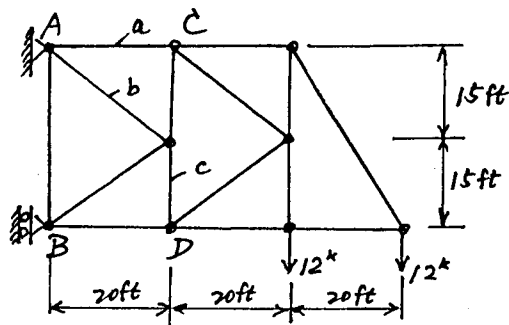
1. 兩塊木板以強力膠接合, 若木板容許垂直應力 $\sigma_{all} = 60 \text{ MPa}$, 容許剪應力 $\tau_{all} = 24 \text{ MPa}$, 膠容許垂直應力 $\sigma_{all} = 80 \text{ MPa}$, 容許剪應力 $\tau_{all} = 30 \text{ MPa}$, 試求最大張應力 σ_x .



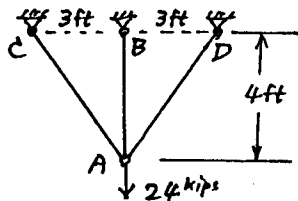
2. 試用力矩面積法求 D 點撓度. $E = 150 \text{ GPa}$, $I = 20 \times 10^6 \text{ mm}^4$.



3. 試求圖示 a, b, c 桿件之應力.



4. 試求圖示各桿件應力 σ_b , σ_s 及 A 點垂直變位.



AB 為銅棒 $E_b = 15 \times 10^3 \text{ ksi}$
 $A_b = 3.0 \text{ in}^2$

AC, AD 為鋼棒 $E_s = 30 \times 10^3 \text{ ksi}$
 $A_s = 2.5 \text{ in}^2$

5. 試求圖示圖形之形心位置.

