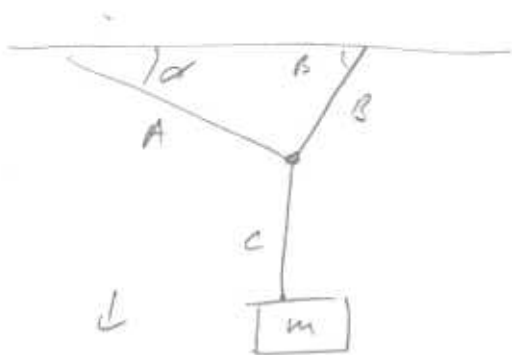
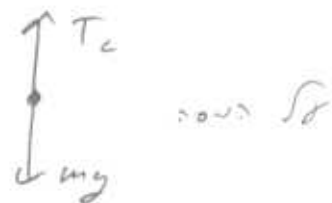


10-1-041



$$\sum F_m = T_c - mg = 0$$

$$T_c = mg$$



$$\sum F_x = T_B \cos \beta - T_A \cos \alpha = 0$$

$$\sum F_y = T_B \sin \beta + T_A \sin \alpha - T_c = 0$$



$$T_A \left(\frac{\cos \alpha}{\cos \beta} \sin \beta + \sin \alpha \right) = mg$$

$$T_A = mg \frac{\cos \beta}{\sin \alpha + \cos \alpha \tan \beta}$$

$$T_B = mg \frac{\cos \alpha}{\sin(\alpha + \beta)}$$