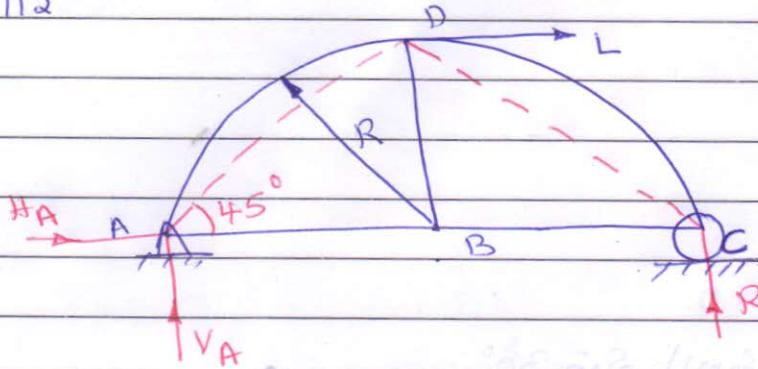


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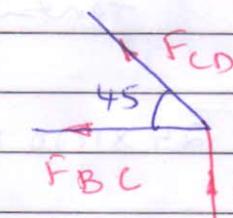
$$\sum M_A = 0$$

$$L \times R = R_C \times 2R$$

$$R_C = \frac{L \times R}{2R}$$

$$R_C = \frac{L}{2}$$

Joint C



$$R_C = \frac{L}{2}$$

$$\sum F_y = 0$$

$$F_{CD} \sin 45^\circ = R_C$$

$$F_{CD} = \frac{L}{2}$$

$$2 \sin 45^\circ$$

$$= 0.707 L$$

$$\sum F_x = 0$$

$$F_{BC} + F_{CD} \cos 45^\circ = 0$$

$$F_{BC} = -0.707 L \cos 45^\circ$$

$$= -0.5 L$$