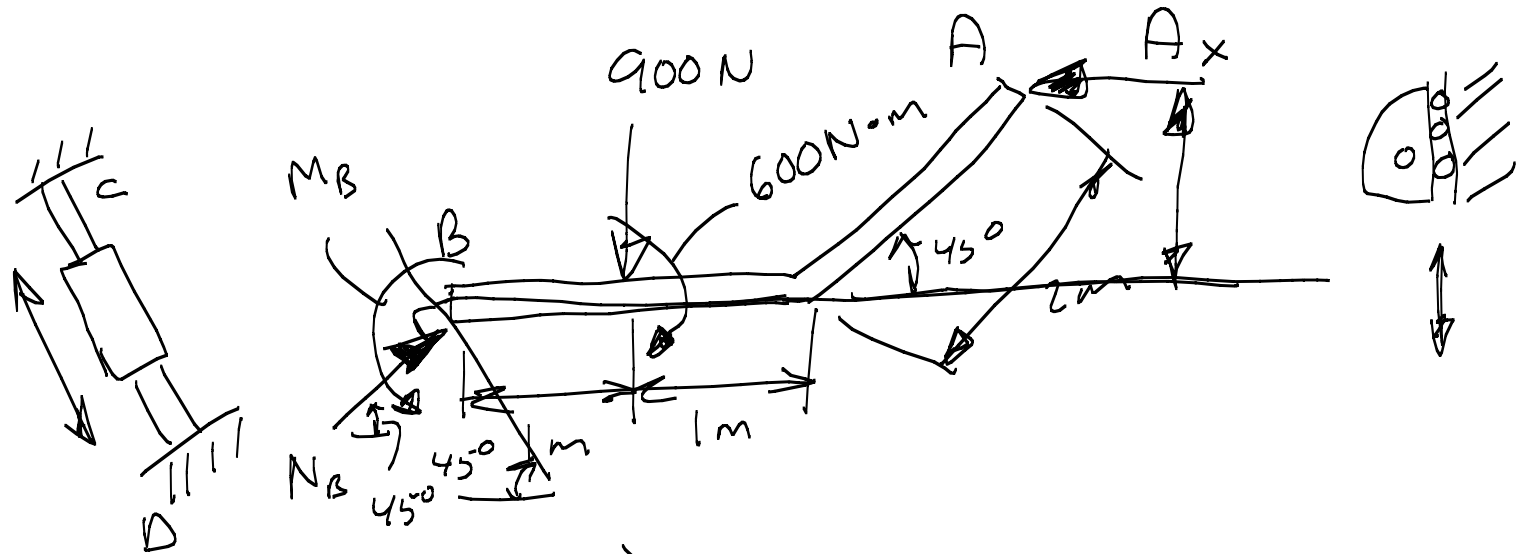


5.42



Unknowns, N_B , M_B , A_x (3)

$$\rightarrow \sum F_x = 0 \Rightarrow N_B \cos 45^\circ - A_x = 0$$

$$\uparrow \sum F_y = 0 \Rightarrow N_B \sin 45^\circ - 900\text{N} = 0$$

$$\boxed{N_B = 1272.8\text{N}}$$

$$\sum F_x = 0 \Rightarrow \boxed{A_x = 900\text{N}}$$

$$\rightarrow \sum M_B = 0 \Rightarrow M_B - (900\text{N})(1\text{m}) - (600\text{N}\cdot\text{m}) + (A_x)(2\text{m})(\sin 45^\circ) = 0$$

$$\boxed{M_B = 227\text{N}\cdot\text{m}}$$