Total load = Area of triangle

$= \frac{1}{2} \times b \times h.$

$= \frac{1}{2} \times l \times W = \frac{Wl}{2}$

$\Rightarrow \boxed{R_A + R_B = \frac{Wl}{2}}$

Moment about A $\sum M_A = 0$

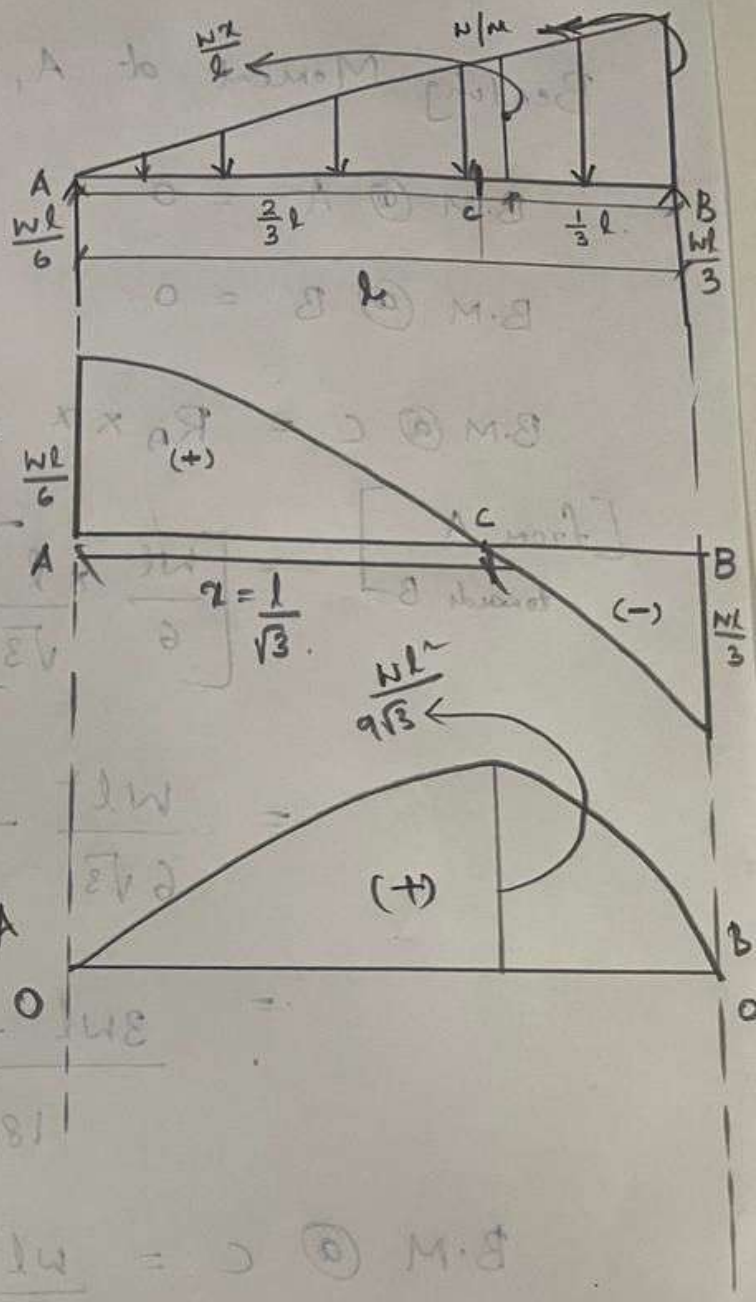
$R_B \times l - \frac{1}{2} \times l \times W \times \frac{2}{3} l = 0.$

$l R_B = \frac{Wl^2}{3}$

$\boxed{R_B = \frac{Wl}{3}}$

$R_A = \frac{Wl}{2} - \frac{Wl}{3} = \frac{Wl}{6}$

$\boxed{R_A = \frac{Wl}{6}}$



S.F @ B $= -\frac{Wl}{3}$

S.F @ A $= -R_B + \frac{1}{2} Wl$

$= -\frac{Wl}{3} + \frac{Wl}{2}$

$= +\frac{Wl}{6}.$

Let AC $= x.$

S.F @ C $= 0 = \frac{Wl}{6} - \left[\frac{1}{2} \times x \times \frac{Wx}{l}\right]$ ($\frac{1}{2} \times b \times h$ ← Area of Δngle)

$\therefore AC = \frac{l}{\sqrt{3}}$

$\frac{Wl}{6} = \frac{Wx^2}{2l} \Rightarrow x^2 = \frac{l^2}{3} \Rightarrow x = \frac{l}{\sqrt{3}}.$

Bending Moment at A, B & C.

B.M @ A = 0

B.M @ B = 0.

$$B.M @ C = R_A \times x - \frac{1}{2} \times x \times \frac{Wx}{l} \times \frac{x}{3}.$$

[from A towards B]

$$= \left[\frac{Wl}{6} \times \frac{l}{\sqrt{3}}\right] - \frac{1}{2} \times \frac{l}{\sqrt{3}} \times \frac{W \times l}{l} \times \frac{l}{\sqrt{3}} \times \frac{l}{\sqrt{3}} \times \frac{1}{3}.$$

$$= \frac{Wl^2}{6\sqrt{3}} - \frac{Wl^2}{18\sqrt{3}}.$$

$$= \frac{3Wl^2 - Wl^2}{18\sqrt{3}} = \frac{2Wl^2}{18\sqrt{3}} = \frac{Wl^2}{9\sqrt{3}}$$

$$B.M @ C = \frac{Wl^2}{9\sqrt{3}}.$$