$\rightarrow \frac{3}{2} ql \qquad \sum X = 0$

$\leftarrow \frac{12EI}{(2l)^3} w_B \qquad \frac{3}{2} ql - \frac{12EI}{8l^3} w_B - \frac{6EI}{4l^2} \varphi_B = 0$

$\leftarrow \frac{6EI}{(2l)^2} \varphi_B \quad * \quad \frac{3}{2} ql - \frac{3EI}{2l^3} w_B - \frac{3}{2} \frac{EI}{l^2} \varphi_B = 0$

$$\varphi_B = \left(\frac{3}{2} ql - \frac{3EI}{2l^3} w_B \right) \frac{2l^2}{3EI} = \frac{ql^3}{EI} - \frac{w_B}{l}$$

$$\frac{ql^2}{8} - \frac{5EI}{l} \left(\frac{ql^3}{EI} - \frac{w_B}{l} \right) - \frac{3EI}{2l^2} w_B =$$

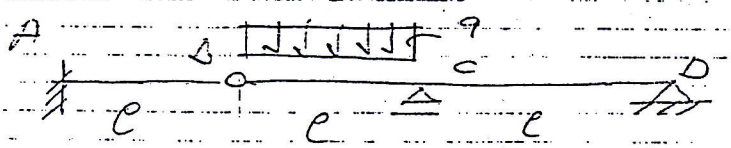
$$= \frac{ql^2}{8} - 5ql^2 + \frac{5EI}{l^2} w_B - \frac{3EI}{2l^2} w_B =$$

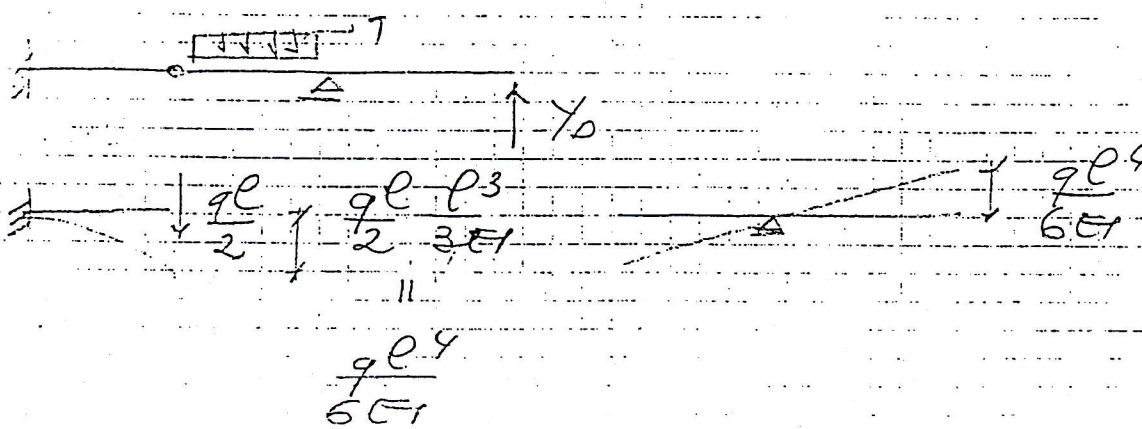
$$= -\frac{39}{4} ql^2 + \frac{7EI}{2l^2} w_B = 0$$

$$w_B = \frac{39}{4} ql^2 \frac{l^2}{7EI} = \frac{39}{28} \frac{ql^4}{EI}$$

$$\varphi_B = \frac{ql^3}{EI} - \frac{39}{28} \frac{ql^3}{EI} = -\frac{11}{28} \frac{ql^3}{EI}$$

B.2)





1)