

$$= \frac{2M_H l}{3EI} + \frac{45 q l^3}{24 EI} - \frac{M_H l}{6EI} + \frac{17 q l^3}{6 EI} =$$

$$= \frac{M_H l}{2EI} + \frac{113 q l^3}{24 EI}$$

$$|M_{BA} = -\frac{3EI}{l} \left(\frac{M_H l}{2EI} + \frac{113 q l^3}{24 EI} \right) = -\frac{3}{2} M_H - \frac{113 q l^2}{8}$$

$$-\frac{3}{2} M_H - \frac{113 q l^2}{8} - 2M_H - \frac{45 q l^2}{8} + M_{BC} = + q l^2 / 2$$

$$-\frac{7}{2} M_H - \frac{158 q l^2}{8} - \frac{q l^2}{2} + M_{BC} = 0$$

$$\frac{158 q l^2}{8} = \frac{79 q l^2}{4}$$

$$-\frac{81 q l^2}{4}$$

$$|M_{BC} = \frac{7}{2} M_H + \frac{81 q l^2}{4}$$

$$-\frac{l}{3EI} \left(-\frac{3}{2} M_H - \frac{113 q l^2}{8} \right) = -\frac{l}{3EI} \left(\frac{7}{2} M_H + \frac{81 q l^2}{4} \right) - \frac{q l^3}{12EI}$$

$$\frac{M_H l}{2EI} + \frac{113 q l^3}{24 EI} = -\frac{7}{6} \frac{M_H l}{EI} - \frac{81 q l^3}{12EI} - \frac{q l^3}{12EI}$$

$$\frac{1}{3} \frac{M_H l}{EI} = -\frac{113 - 162 - 2}{24 EI} q l^3 = -\frac{277 q l^3}{24 EI}$$

$$|M_H = -\frac{3EI}{58} \frac{277 q l^3}{24 EI} = -\frac{277 q l^2}{40}$$

$$|M_{BC} = \frac{81 q l^2}{4} - \frac{7}{2} \frac{277 q l^2}{40} = -\frac{319 q l^2}{80}$$

$$|M_{BA} = +\frac{3}{2} \frac{277 q l^2}{40} - \frac{113 q l^2}{8} = \frac{831 q l^2}{80} - \frac{1130 q l^2}{80}$$

$$= -\frac{299 q l^2}{80}$$

$$|M_{CH} = \frac{277 q l^2}{20} - \frac{45 q l^2}{8} = \frac{329 q l^2}{80}$$