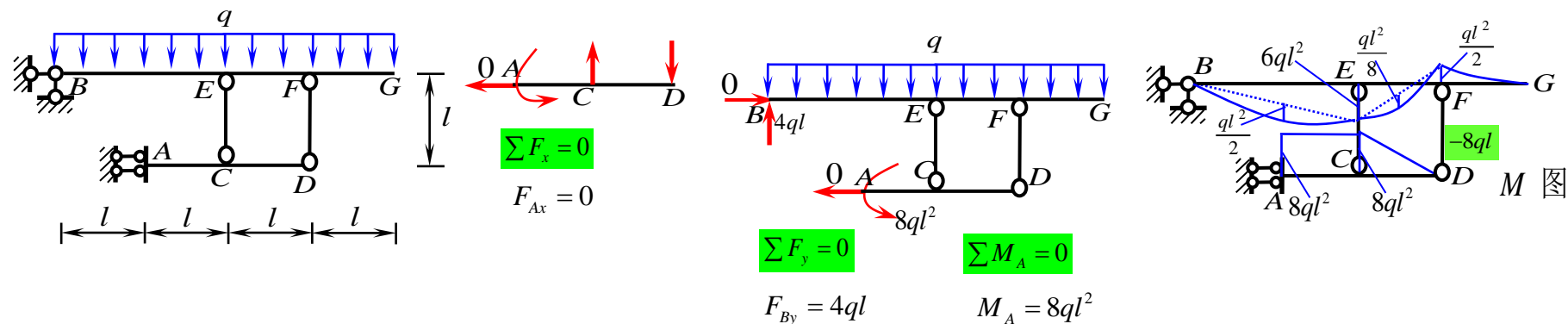
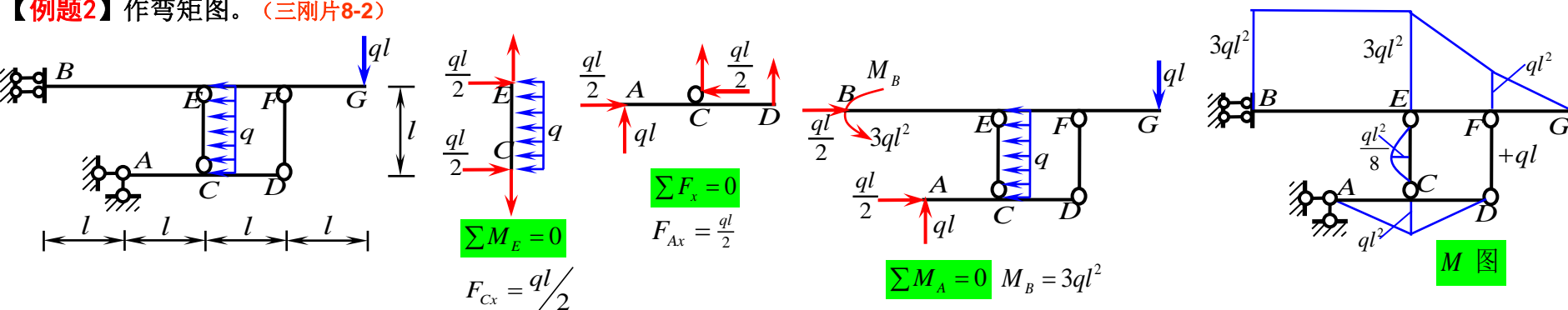


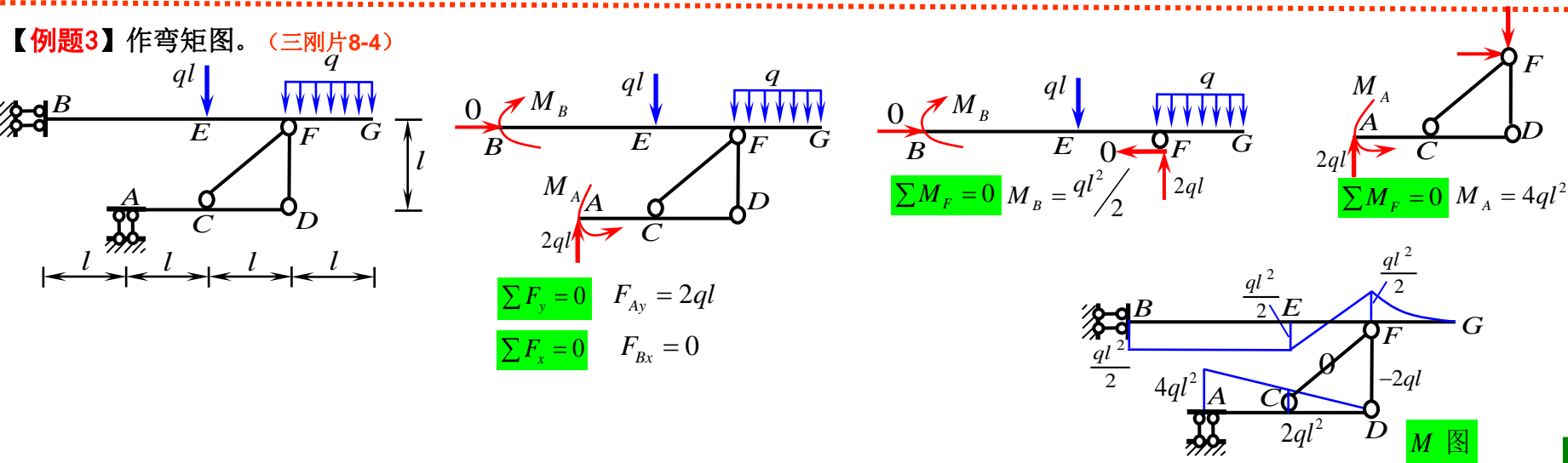
【例题1】作弯矩图。（三刚片8-1）



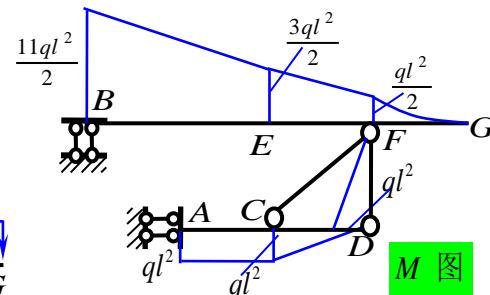
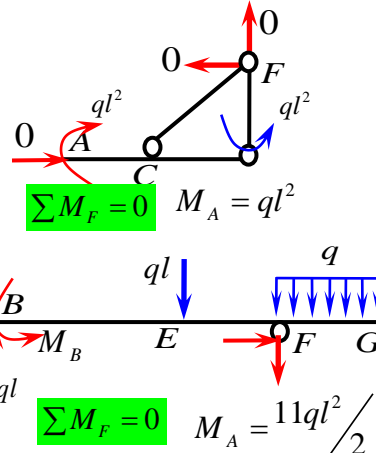
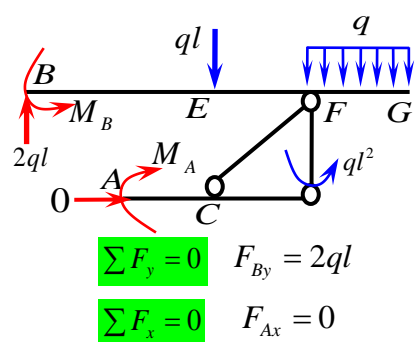
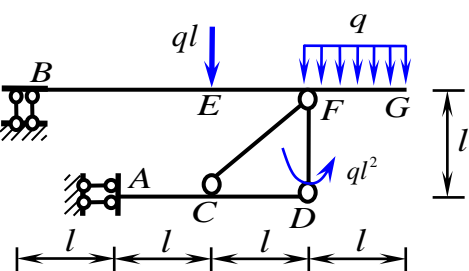
【例题2】作弯矩图。（三刚片8-2）



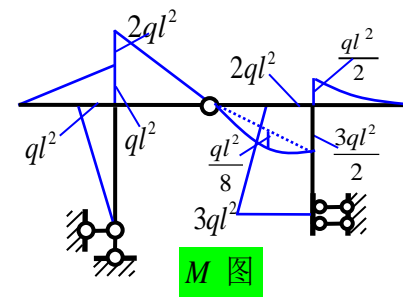
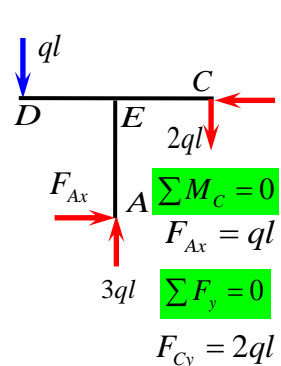
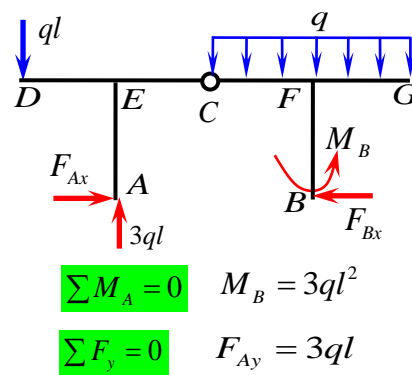
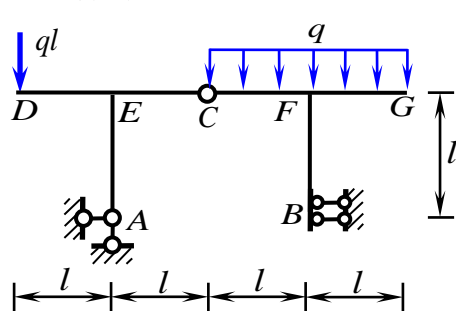
【例题3】作弯矩图。（三刚片8-4）



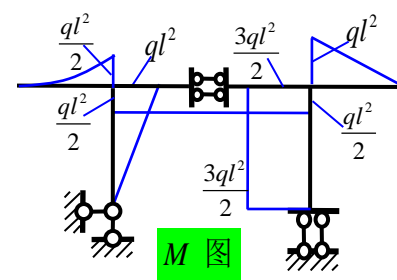
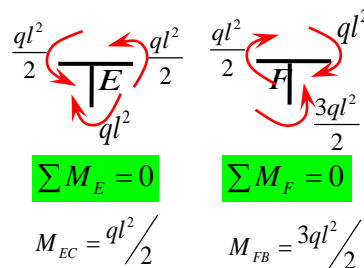
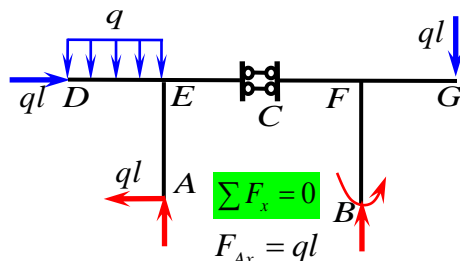
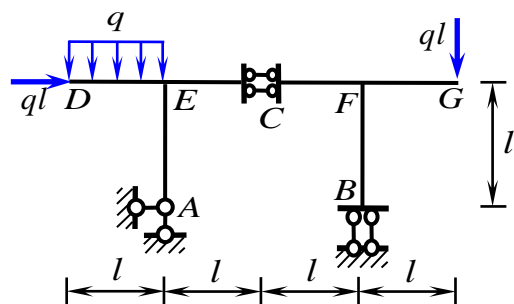
【例题4】弯矩图。（三刚片8-5）



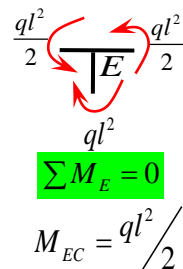
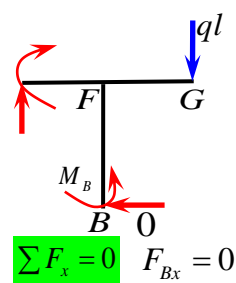
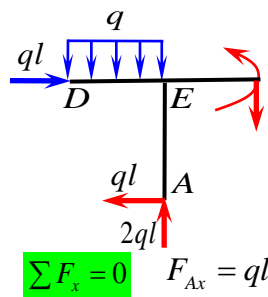
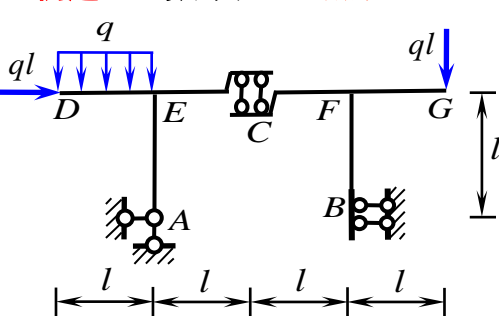
【例题5】弯矩图。（三刚片8-7）



【例题6】弯矩图。（三刚片8-13）

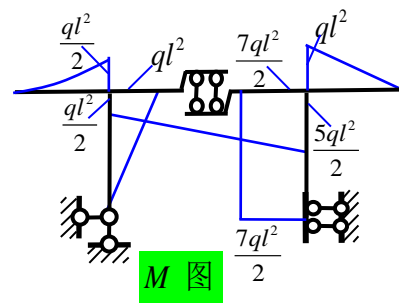


【例题7】弯矩图。（三刚片8-14）

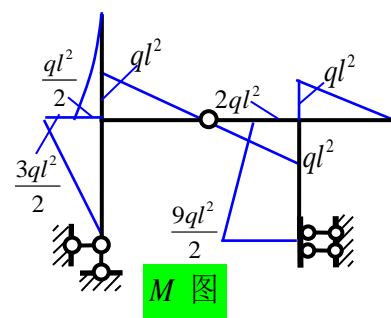
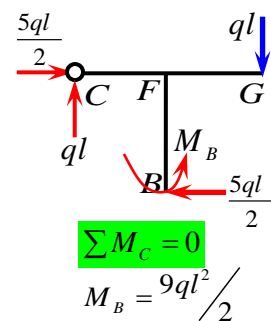
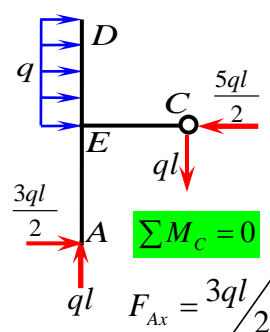
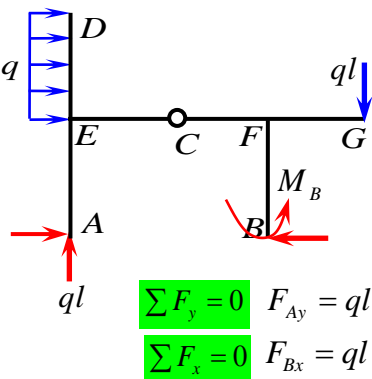
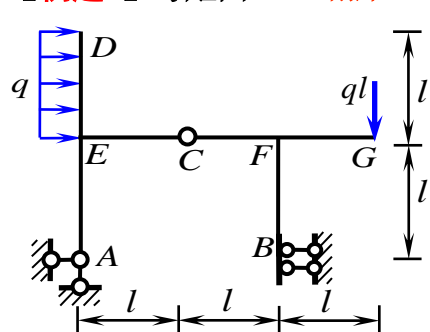


整体隔离体

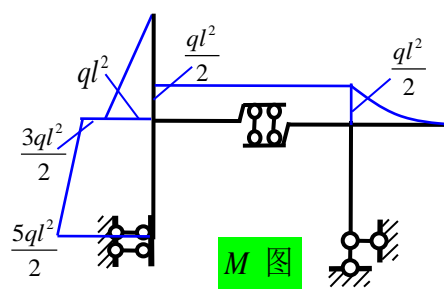
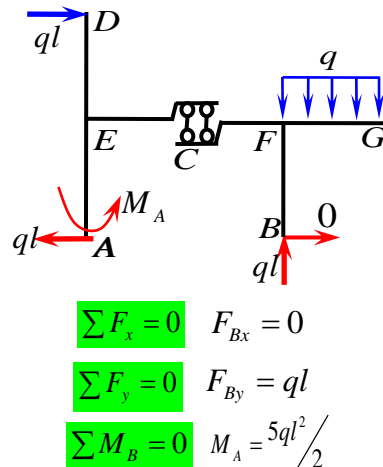
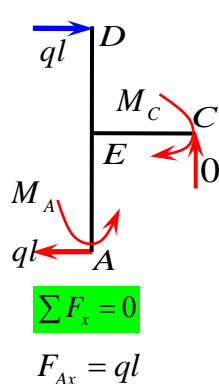
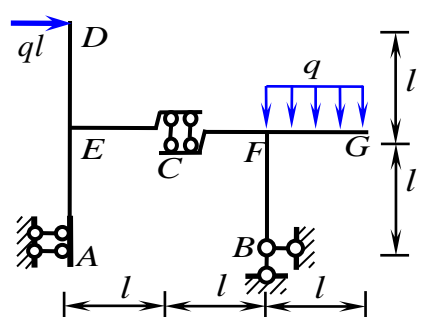
$\sum M_A = 0$
 $M_B = 7ql^2/2$



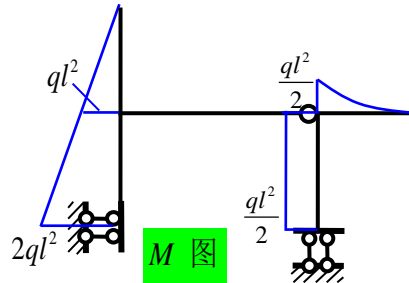
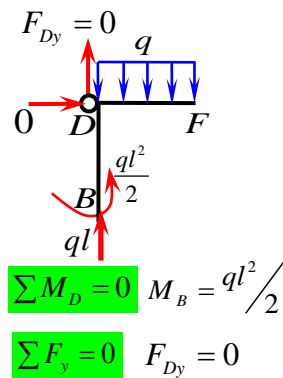
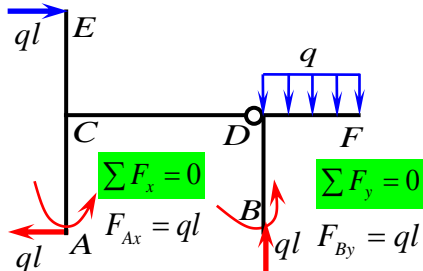
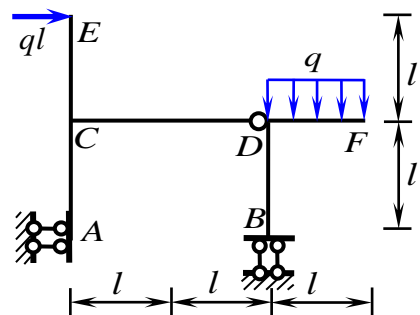
【例题8】弯矩图。（三刚片8-15）



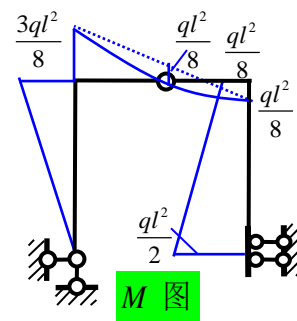
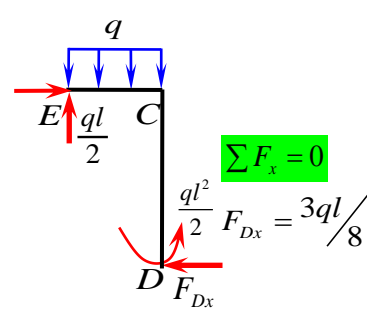
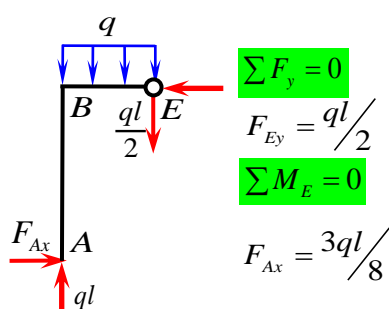
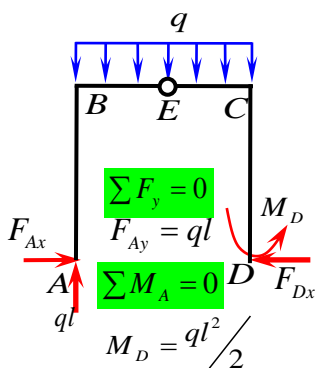
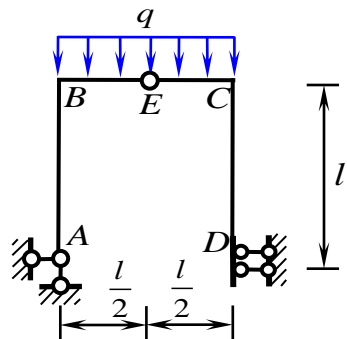
【例题9】弯矩图。（三刚片8-16）



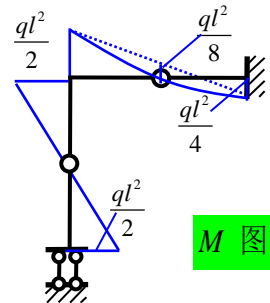
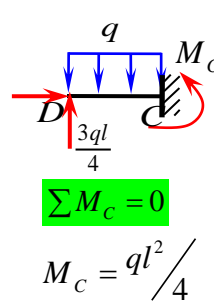
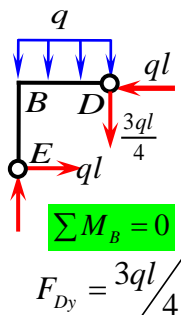
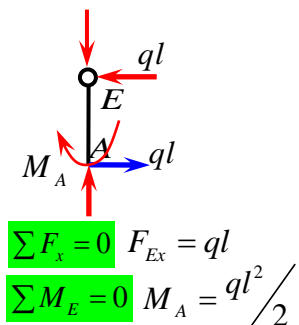
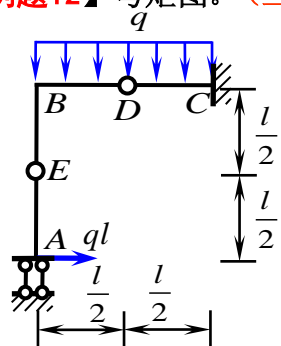
【例题10】弯矩图。（三刚片8-17）



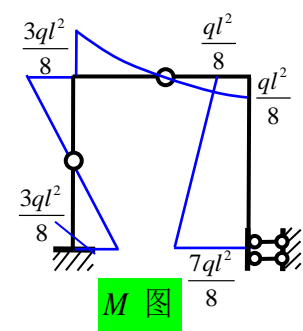
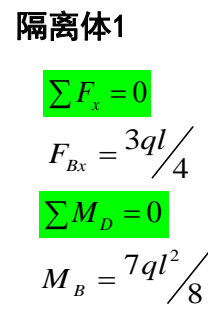
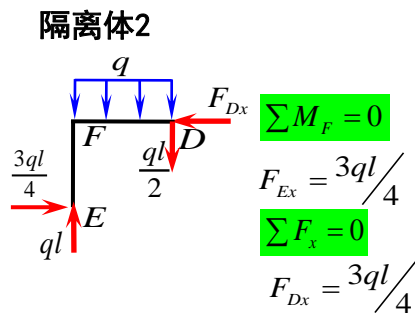
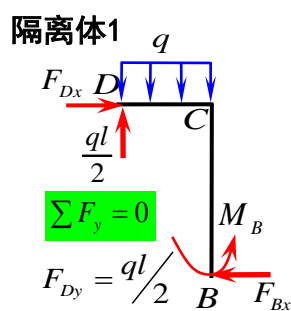
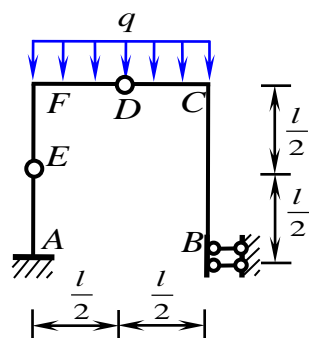
【例题11】弯矩图。（三刚片8-22）



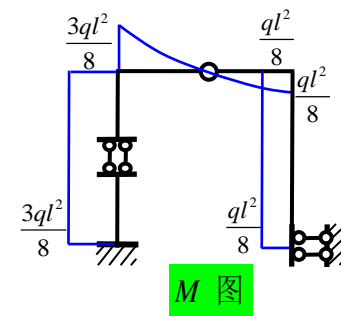
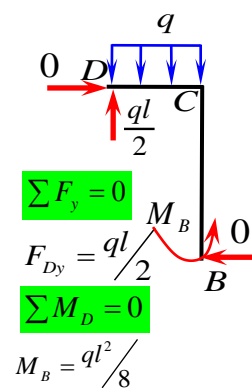
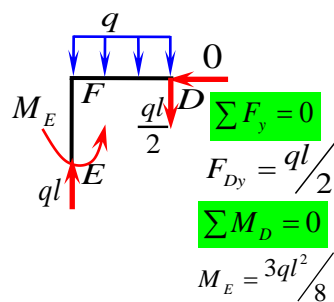
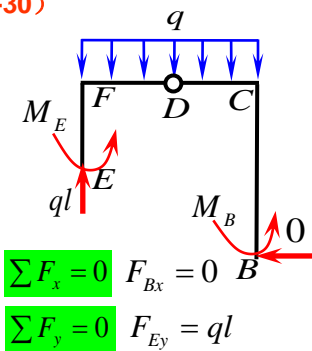
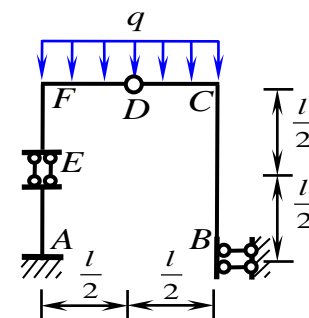
【例题12】弯矩图。（三刚片8-24）



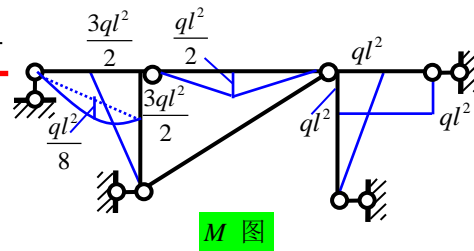
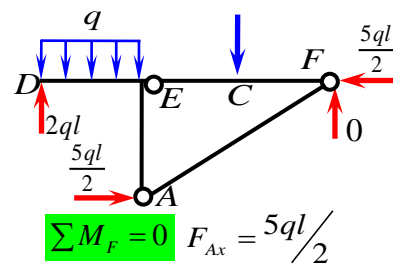
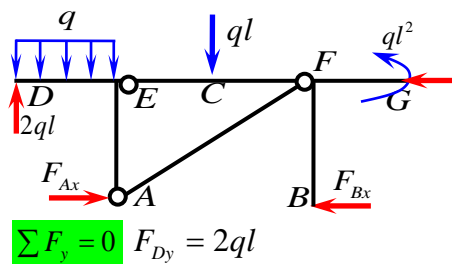
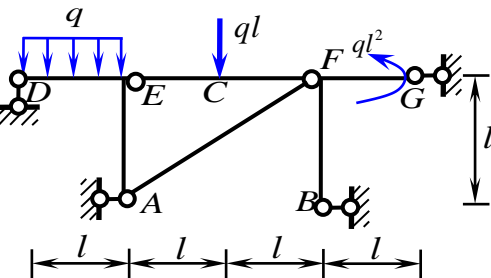
【例题13】弯矩图。（三刚片8-29）



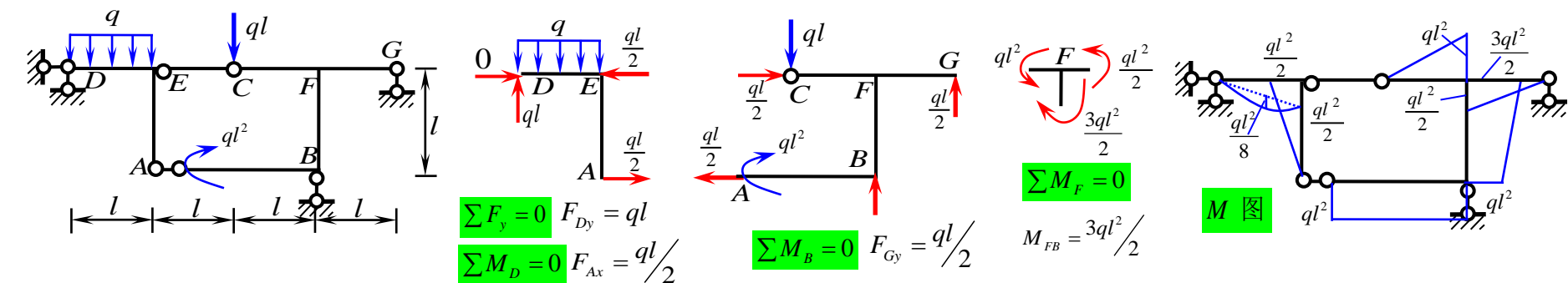
【例题14】弯矩图。（三刚片8-30）



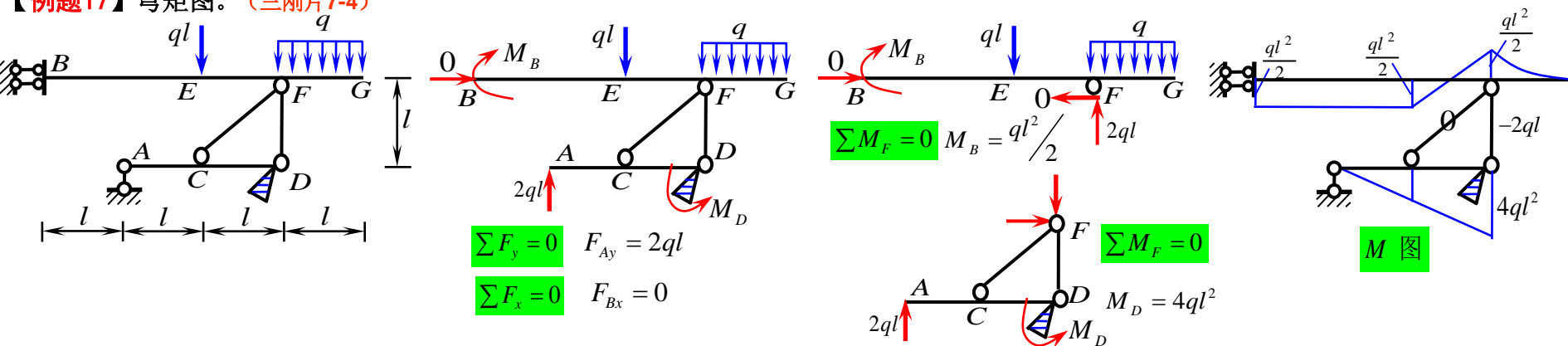
【例题15】弯矩图。（三刚片8-33）



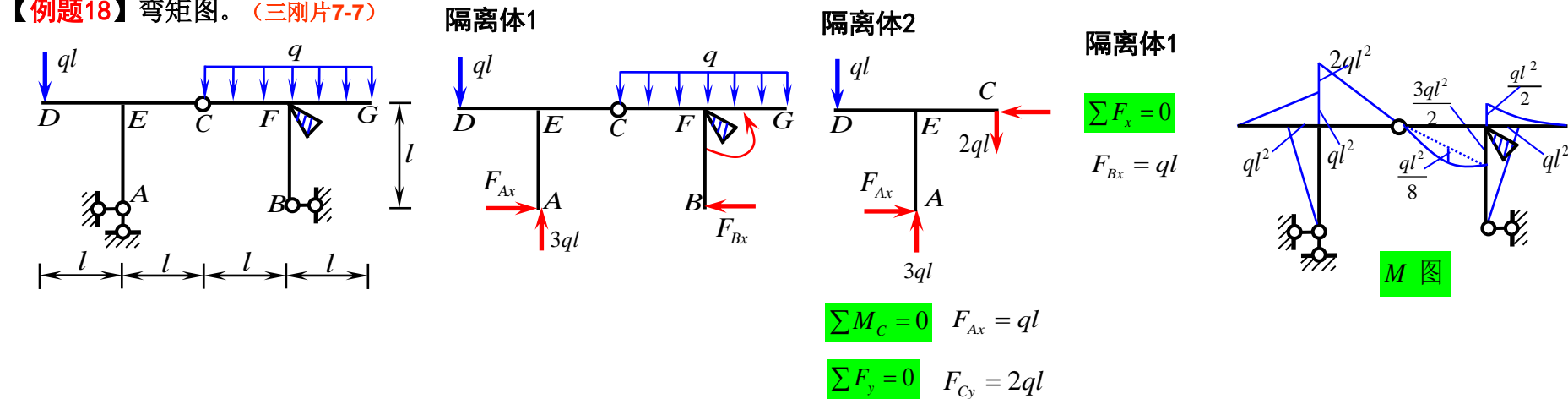
【例题16】弯矩图。（三刚片8-35）



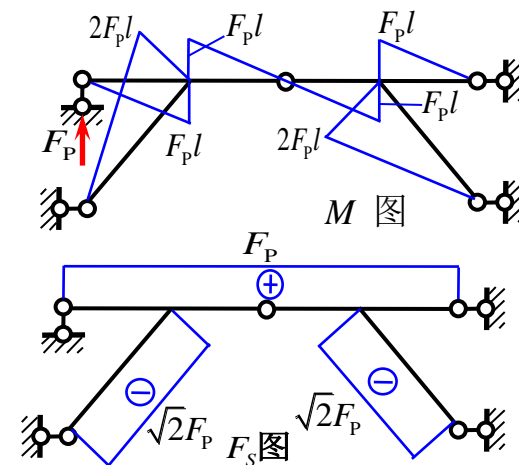
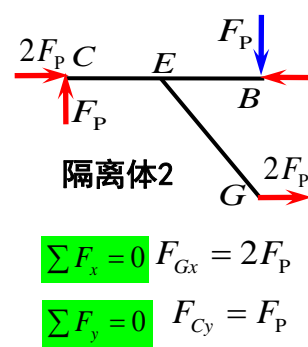
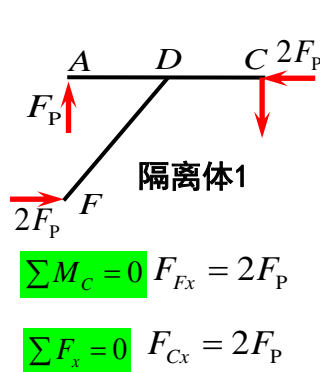
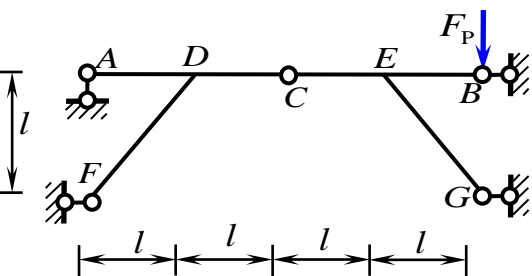
【例题17】弯矩图。（三刚片7-4）



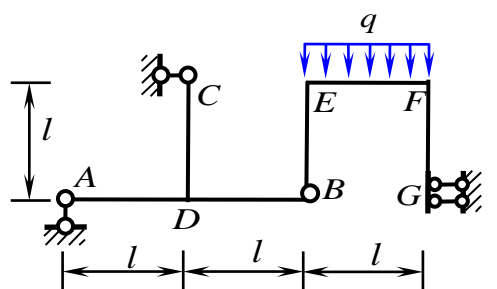
【例题18】弯矩图。（三刚片7-7）



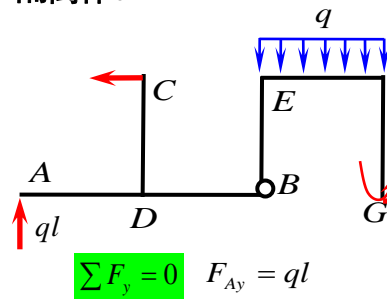
【例题19】弯矩图、剪力图。（三刚片6-4）



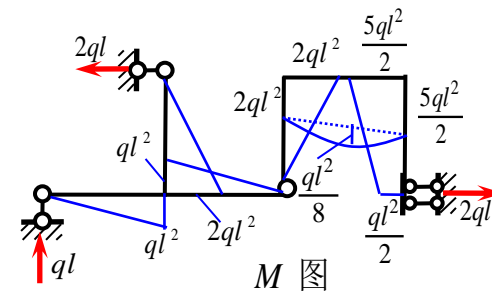
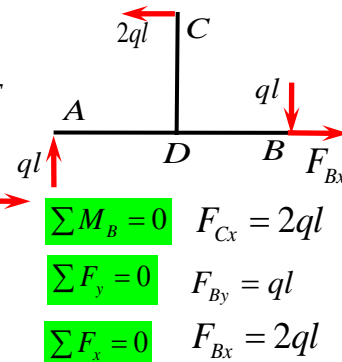
【例题20】弯矩图。（三刚片6-6）



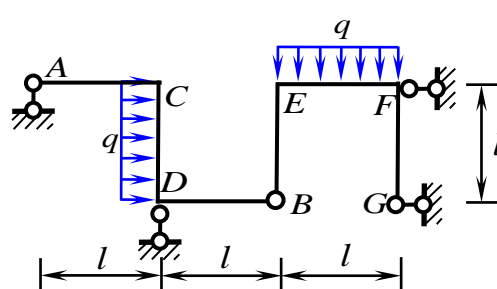
隔离体1



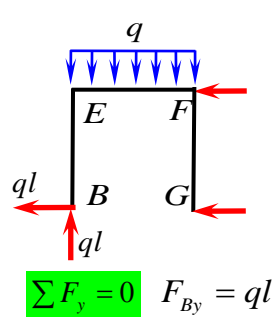
隔离体2



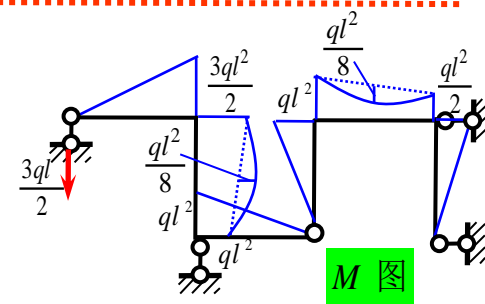
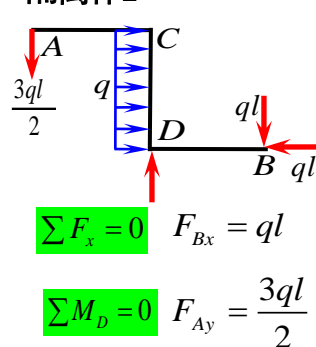
【例题21】弯矩图。（三刚片6-10）



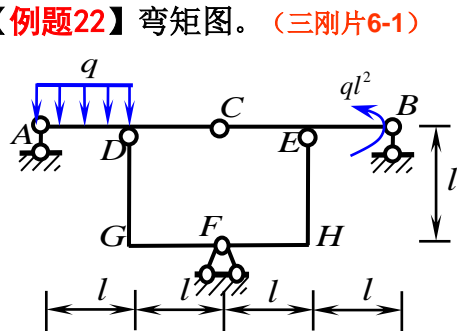
隔离体1



隔离体2



【例题22】弯矩图。（三刚片6-1）



$$\sum F_x = 0$$

$$F_{SDG} = F_{NC} = \frac{3ql}{4}$$

$$\sum F_x = 0$$

$$F_{SEH} = F_{NC} = \frac{3ql}{4}$$

联立解得

$$F_{SC} = \frac{ql}{8} \quad F_{NC} = \frac{3ql}{4}$$

$$\sum M_G = 0 \quad F_{SFG} = \frac{3ql}{4}$$

$$\sum M_H = 0$$

$$F_{SFH} = \frac{3ql}{4}$$

隔离体1

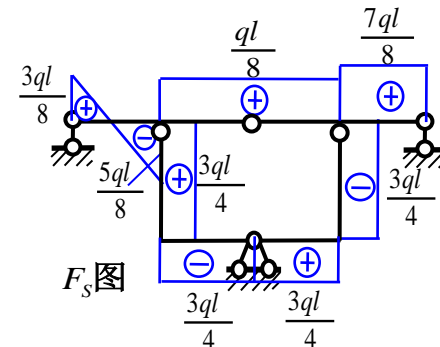
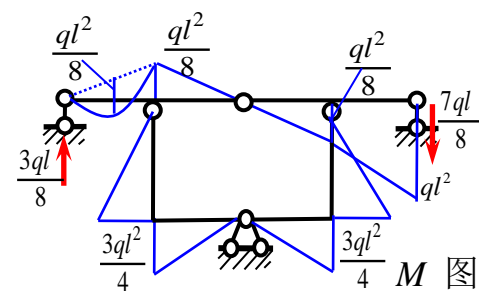
$$\sum M_I = 0$$

$$F_{SC} \times 2l - F_{NC} \times l + \frac{ql^2}{2} = 0$$

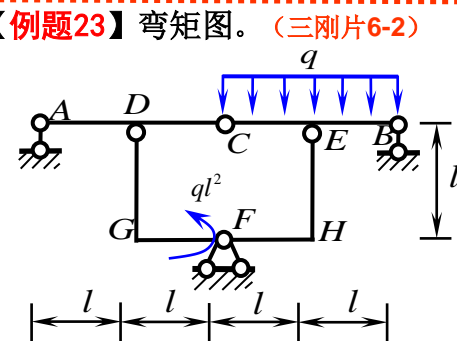
隔离体2

$$\sum M_J = 0$$

$$F_{SC} \times 2l + F_{NC} \times l - ql^2 = 0$$



【例题23】弯矩图。（三刚片6-2）



$$\sum F_x = 0$$

$$F_{SDG} = F_{NC} = \frac{3ql}{2}$$

$$\sum F_x = 0$$

$$F_{SEH} = F_{NC} = \frac{3ql}{2}$$

$$\sum M_F = 0$$

$$F_{SDF} = \frac{ql}{\sqrt{2}}$$

隔离体1

$$\sum M_I = 0$$

$$F_{SC} \times 2l - F_{NC} \times l + \frac{ql}{\sqrt{2}} \times \sqrt{2}l = 0$$

联立解得

$$F_{SC} = \frac{ql}{4} \quad F_{NC} = \frac{3ql}{2}$$

$$\sum M_G = 0$$

$$F_{SFG} = \frac{ql}{2}$$

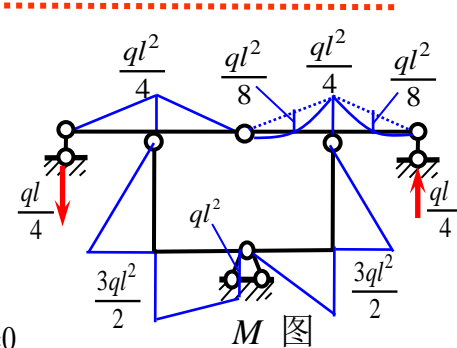
隔离体2

$$\sum M_J = 0$$

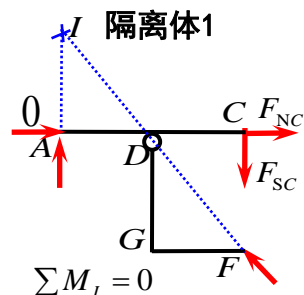
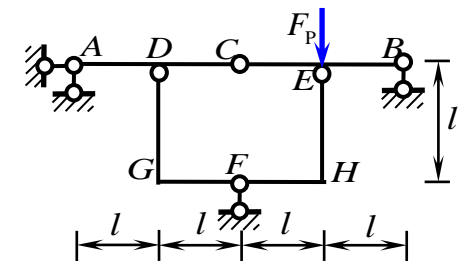
$$F_{SC} \times 2l + F_{NC} \times l - 2ql^2 = 0$$

$$\sum M_H = 0$$

$$F_{SFH} = \frac{3ql}{2}$$

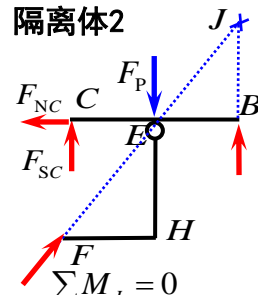


【例题24】弯矩图。（三刚片6-3）



$$\sum M_I = 0$$

$$F_{SC} \times 2l - F_{NC} \times l = 0$$



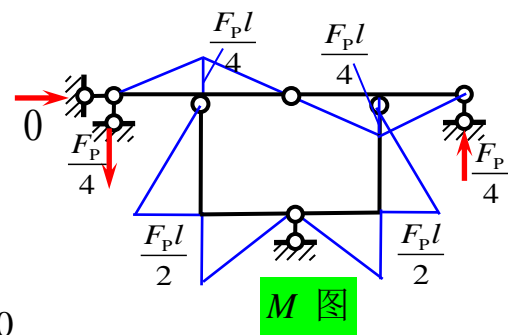
$$\sum M_J = 0$$

$$F_{SC} \times 2l + F_{NC} \times l - F_P \times l = 0$$

联立解得

$$F_{SC} = \frac{F_P}{4}$$

$$F_{NC} = \frac{F_P}{2}$$



$$\sum F_x = 0$$

$$F_{SDG} = F_{NC} = \frac{F_P}{2}$$

$$\sum F_x = 0$$

$$F_{SEH} = F_{NC} = \frac{F_P}{2}$$

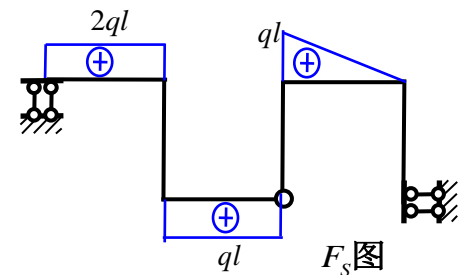
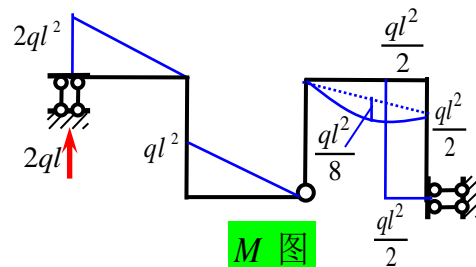
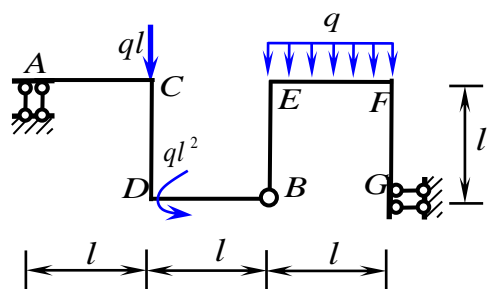
$$\sum M_G = 0$$

$$F_{SFG} = \frac{F_P}{2}$$

$$\sum M_H = 0$$

$$F_{SFH} = \frac{F_P}{2}$$

【例题25】弯矩图。（三刚片6-11）



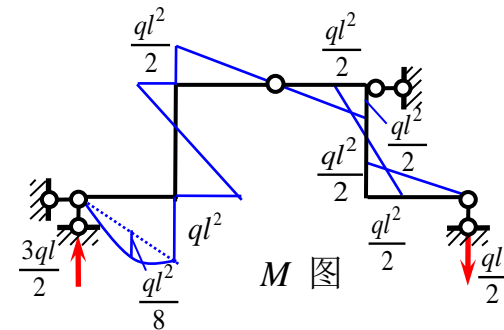
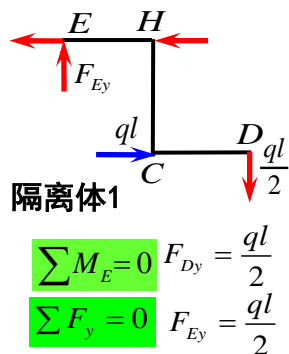
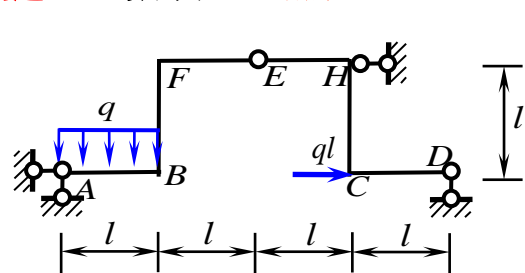
$$\sum F_y = 0$$

$$F_{By} = ql$$

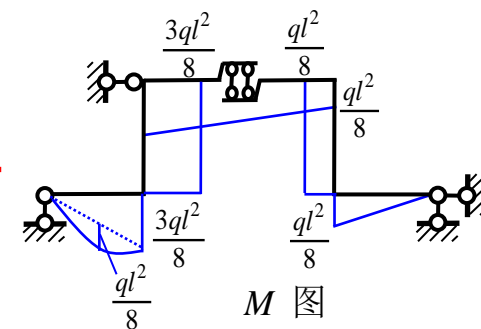
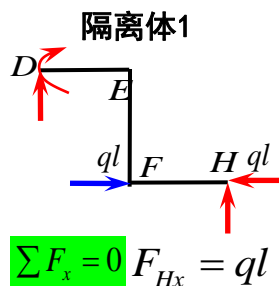
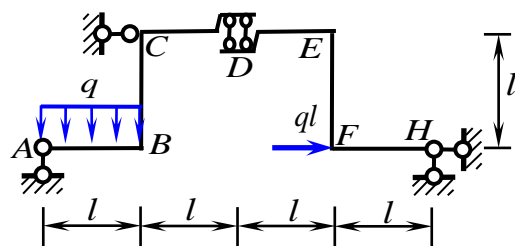
$$\sum F_y = 0$$

$$F_{Ay} = 2ql$$

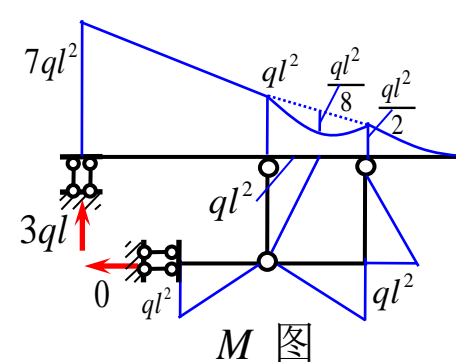
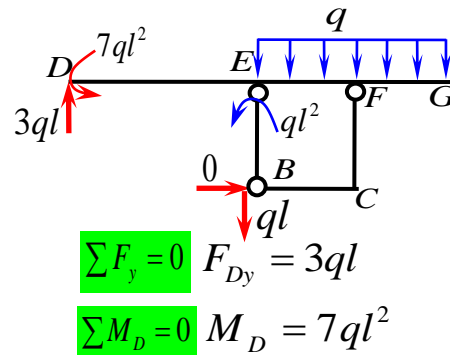
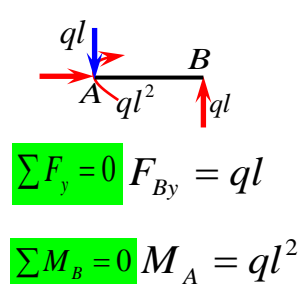
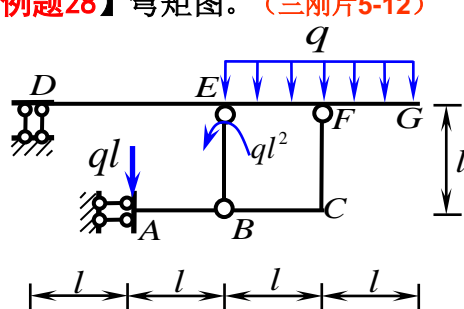
【例题26】弯矩图。（三刚片5-2）



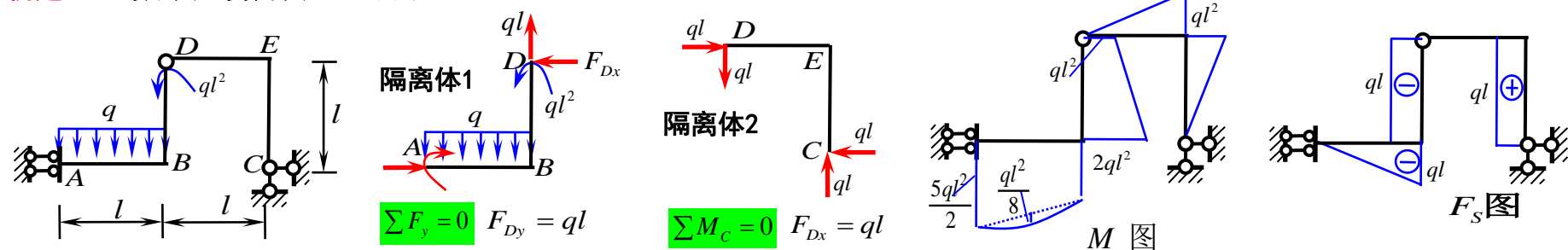
【例题27】弯矩图。（三刚片5-2）



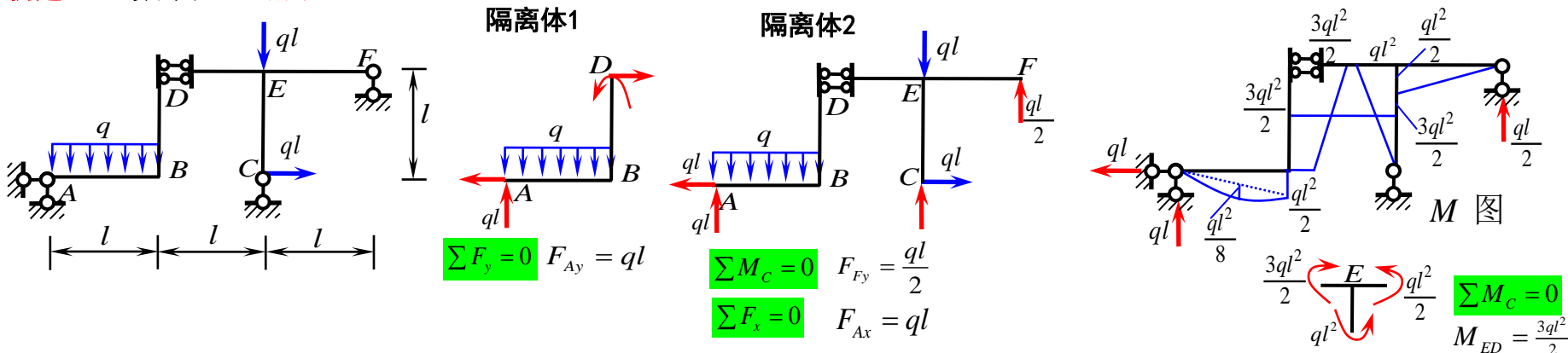
【例题28】弯矩图。（三刚片5-12）



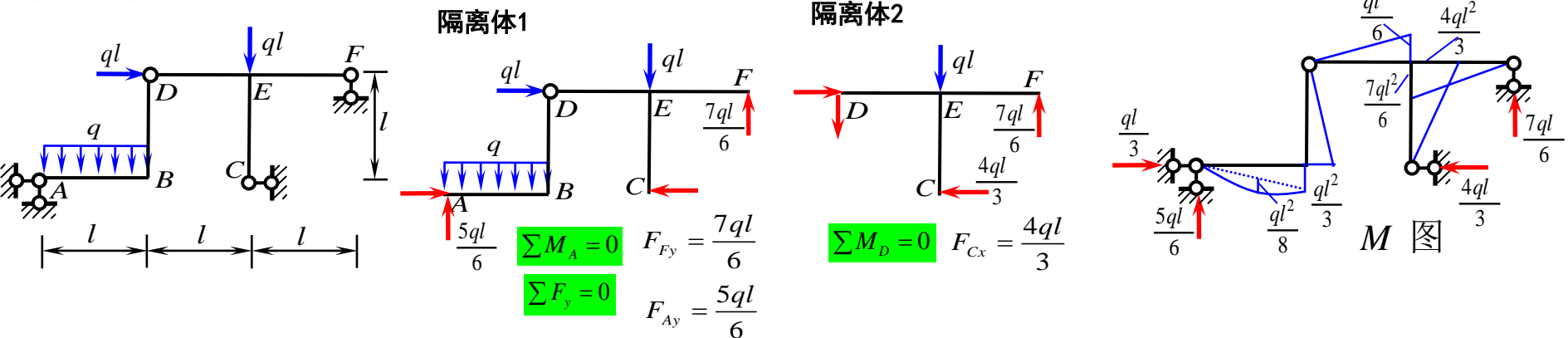
【例题29】弯矩图、剪力图。（三刚片5-19）



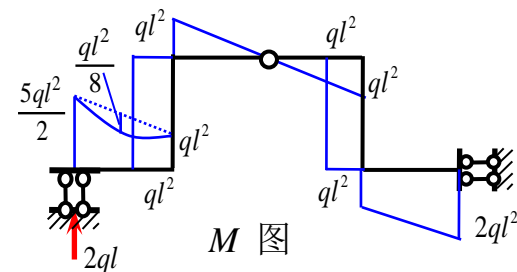
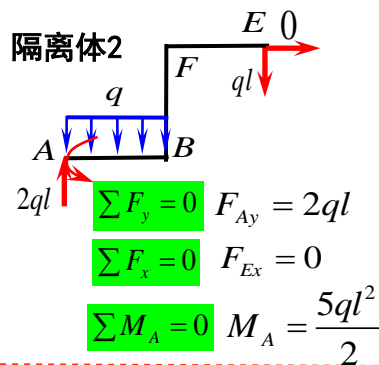
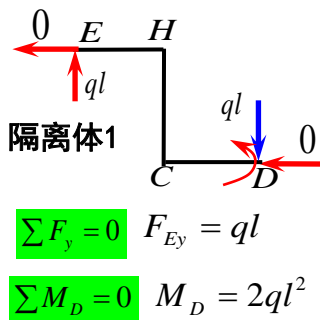
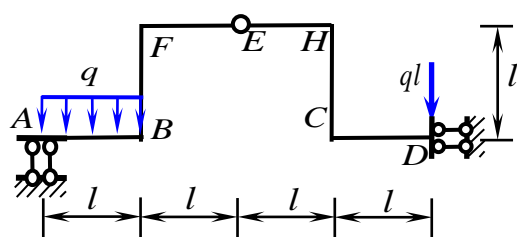
【例题30】弯矩图。（三刚片5-27）



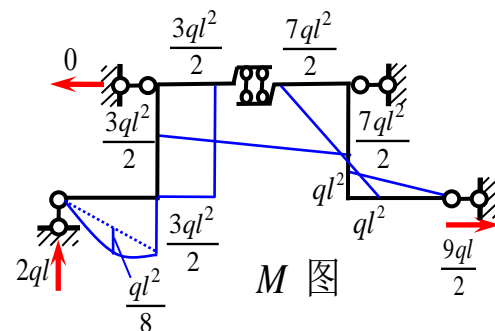
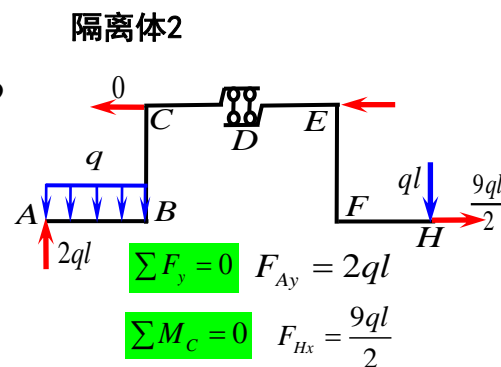
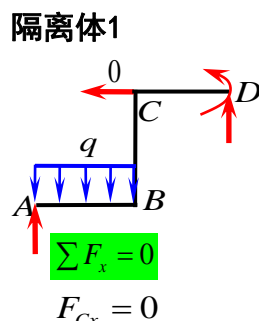
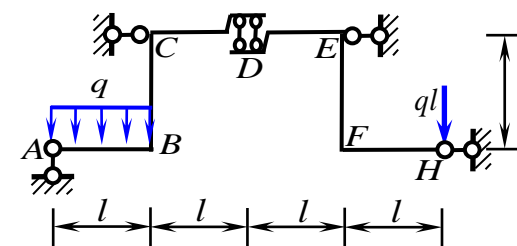
【例题31】弯矩图。（三刚片5-28）



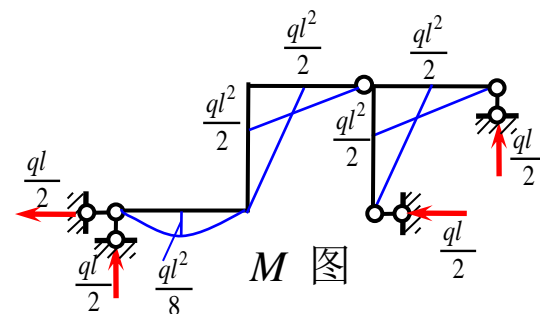
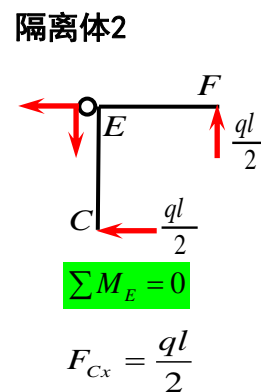
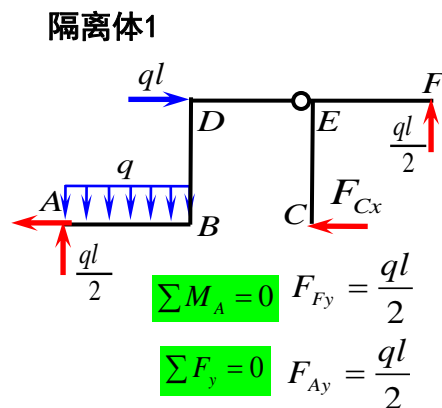
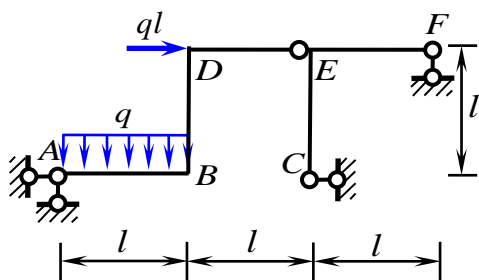
【例题32】弯矩图。（三刚片5-32）



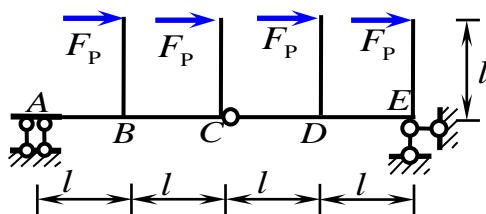
【例题33】弯矩图。（三刚片5-34）



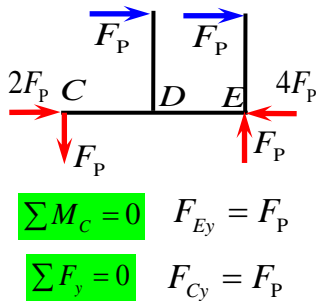
【例题34】弯矩图。（三刚片5-39）



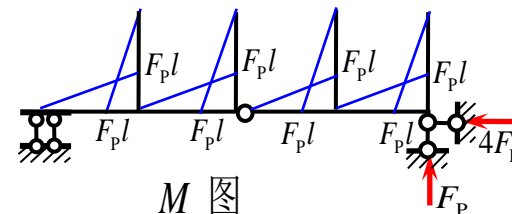
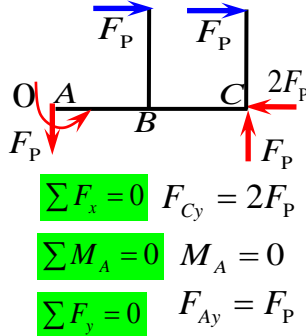
【例题35】弯矩图。（三刚片4-16）



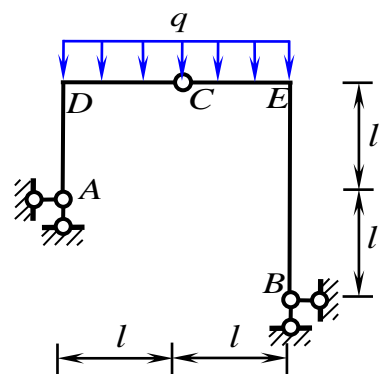
隔离体1



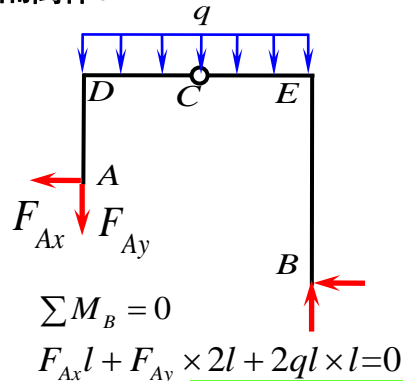
隔离体2



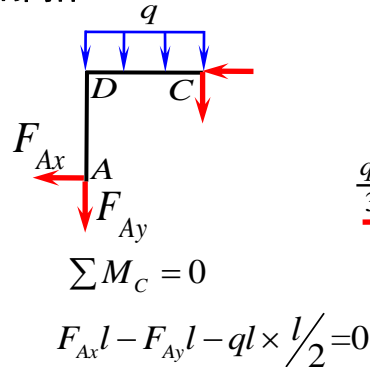
【例题36】弯矩图。（三刚片4-22）



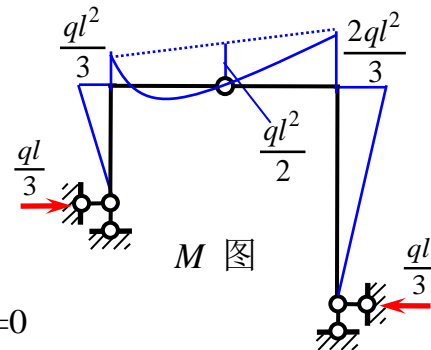
隔离体1



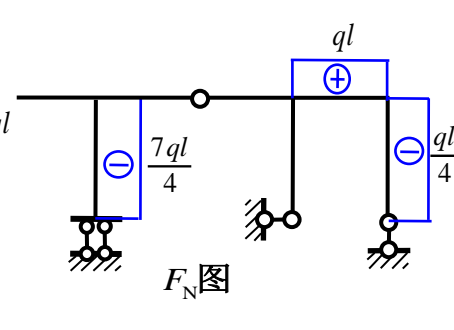
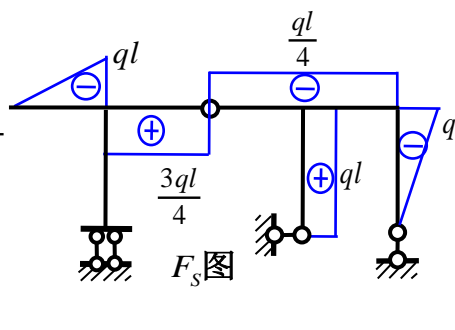
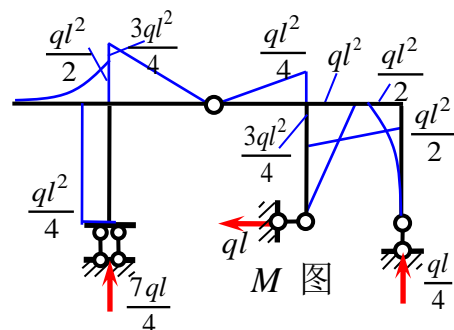
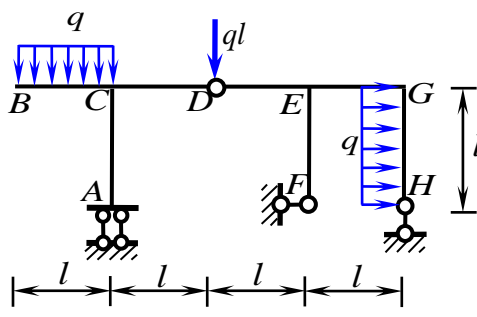
隔离体2



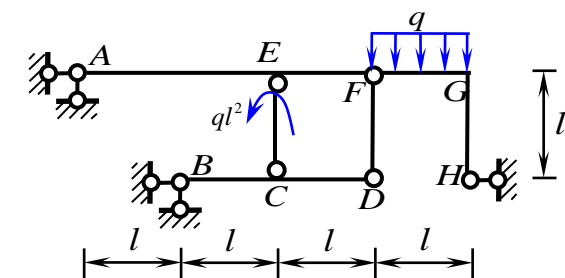
联立求解得： $F_{Ax} = -ql/3$ $F_{Ay} = -5ql/6$



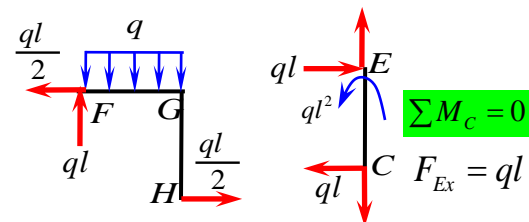
【例题37】内力图。（三刚片4-28）



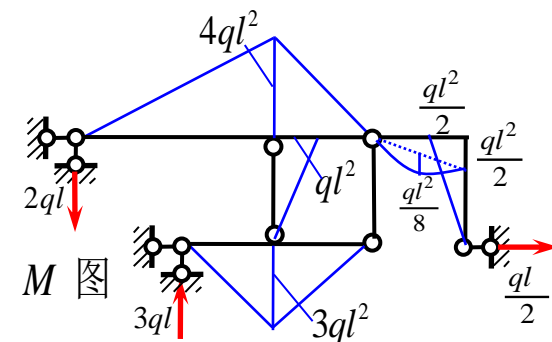
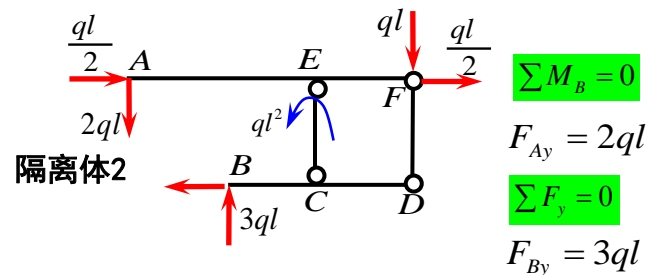
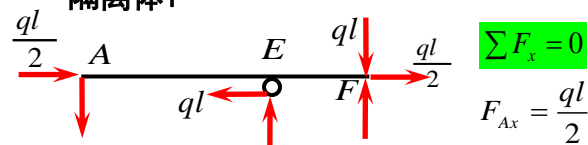
【例题38】弯矩图。（三刚片基附1-20）



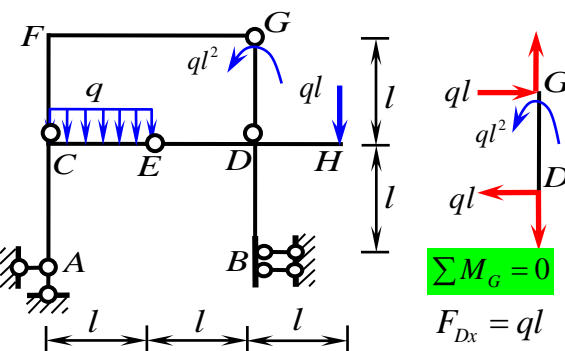
基附型结构，先附后基



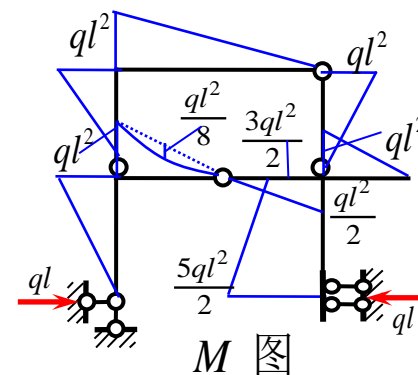
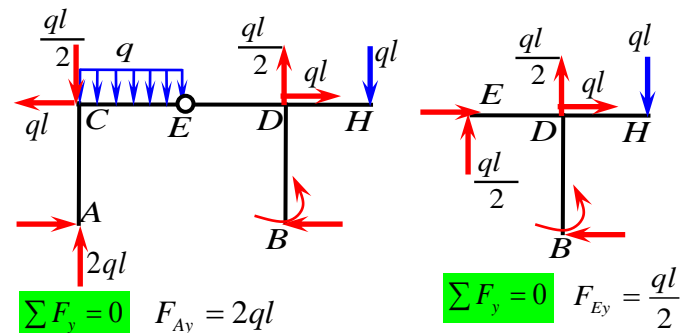
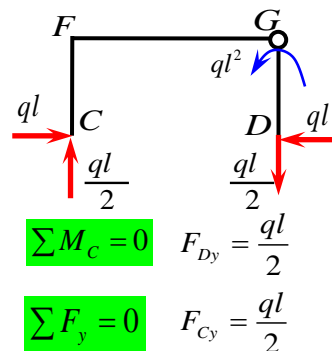
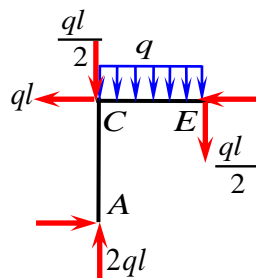
隔离体1



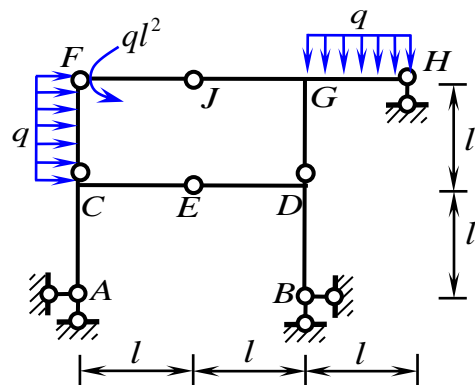
【例题39】弯矩图。（三刚片基附1-25）



基附型结构，先附后基



【例题40】弯矩图。（三刚片基附1-26）

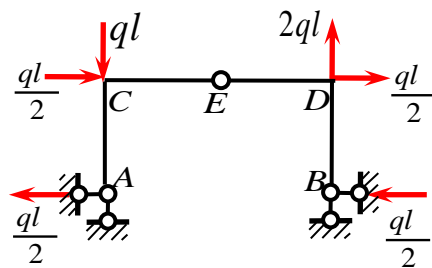


基附型结构，先附后基

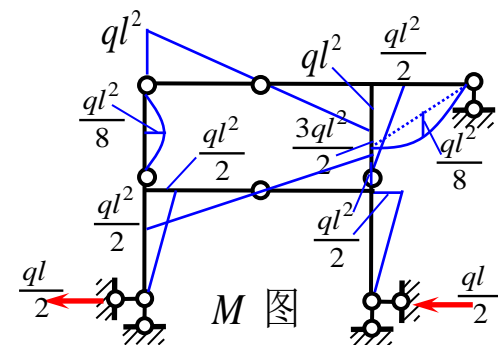
$$\begin{aligned} \sum M_F = 0 & \quad F_{Jy} = ql \\ \sum F_y = 0 & \quad F_{Fy} = ql \end{aligned}$$

$$\begin{aligned} \sum M_C = 0 & \quad F_{Fx} = \frac{ql}{2} \\ \sum F_y = 0 & \quad F_{Cy} = ql \end{aligned}$$

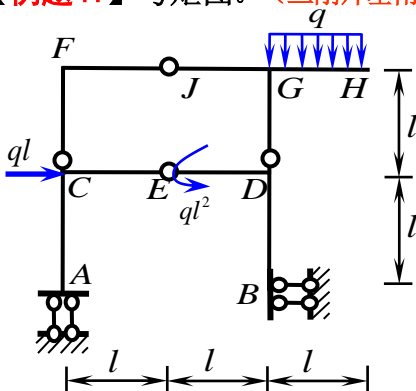
$$\begin{aligned} \sum M_D = 0 & \quad F_{Hy} = 2ql \\ \sum F_y = 0 & \quad F_{Dy} = 2ql \\ \sum F_x = 0 & \quad F_{Dx} = \frac{ql}{2} \end{aligned}$$



基本部分为三刚片组成，取两个隔离体，求支座反力



【例题41】弯矩图。（三刚片基附1-30）



基附型结构，先附后基

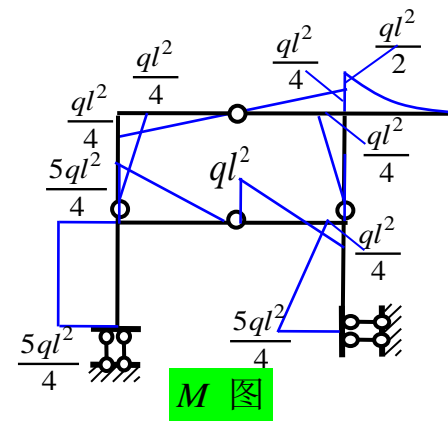
$$\begin{aligned} \sum M_C = 0 & \quad F_{Dy} = \frac{5ql}{4} \\ \sum F_y = 0 & \quad F_{Cy} = \frac{ql}{4} \end{aligned}$$

$$\begin{aligned} \sum M_J = 0 & \quad F_{Cx} = \frac{ql}{4} \end{aligned}$$

$$\begin{aligned} \sum F_x = 0 & \quad F_{Bx} = ql \end{aligned}$$

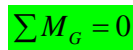
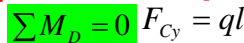
取整体隔离体

$$\begin{aligned} \sum F_y = 0 & \quad F_{Ey} = \frac{5ql}{4} \\ \sum M_E = 0 & \quad M_B = \frac{5ql^2}{4} \end{aligned}$$



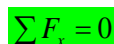
基本部分为三刚片组成，取两个隔离体，求支座反力

【例题42】 弯矩图。（三刚片基附1-33）

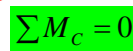


$$F_{Cx} = \frac{ql}{2}$$

$$F_{Dx} = \frac{ql}{2}$$

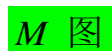


$$F_A = ql$$

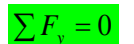


$$F_{\text{Ext}} = 2ql$$

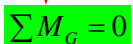
Ly **1**



【例题43】 弯矩图。(三刚片基附1-34)

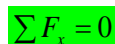


$$E = 2 + l$$

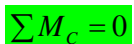


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$$F_{Cx} = \frac{54.7}{2}$$



$$F_{Ax} = \frac{ql}{2}$$

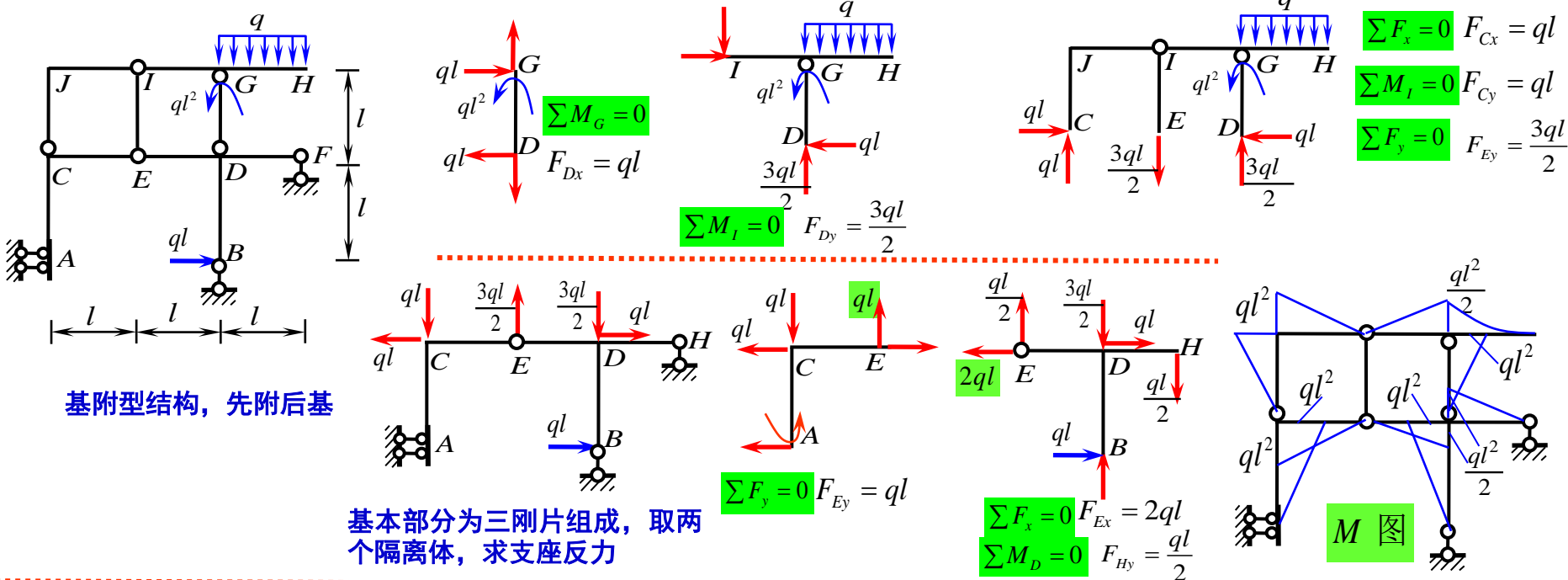


1000

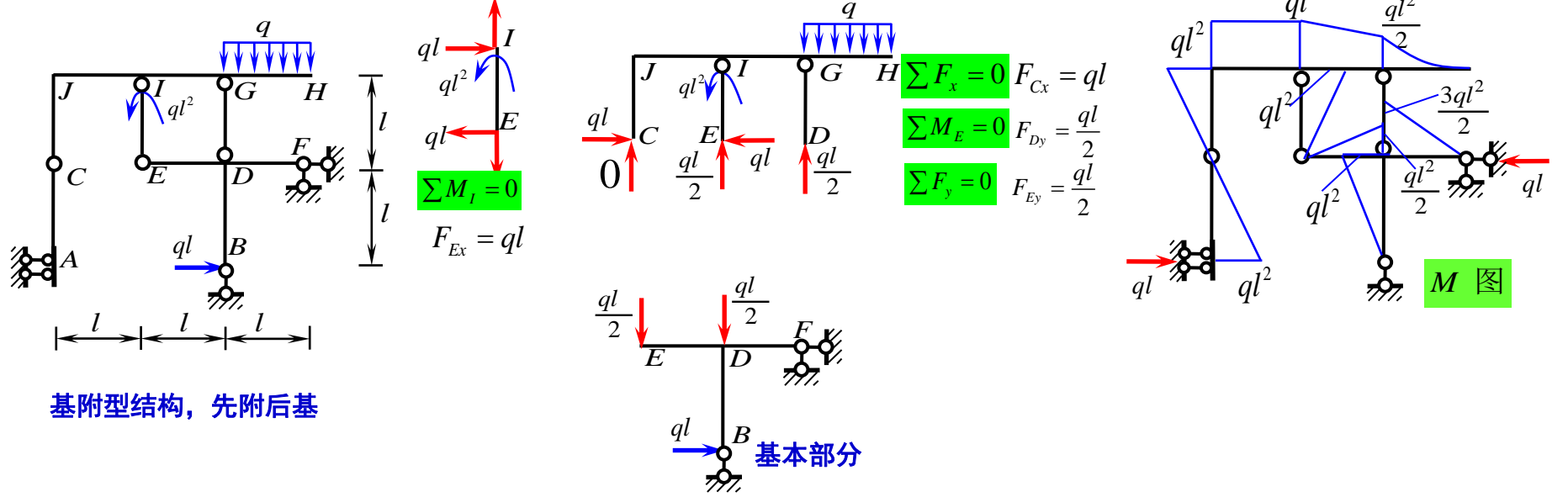
$$F_{Ey} = \frac{ql}{2}$$



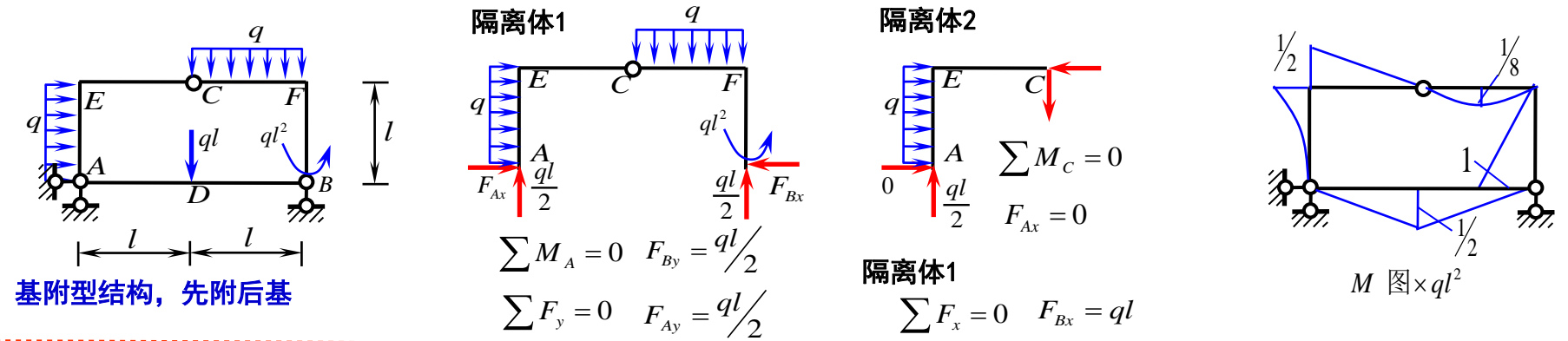
【例题44】弯矩图。（三刚片基附1-36）



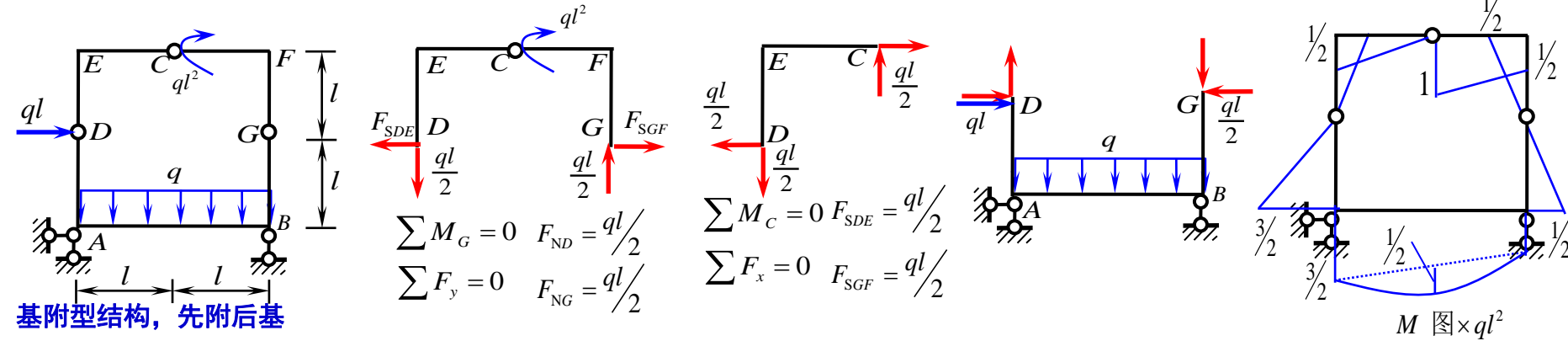
【例题45】弯矩图。（三刚片基附1-39）



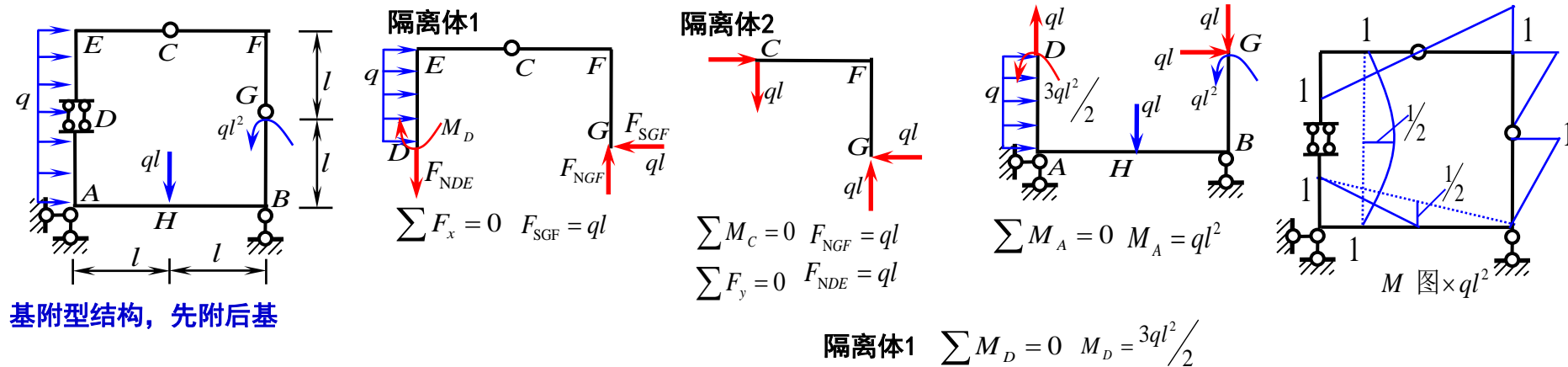
【例题46】弯矩图。（三刚片基附2-6）



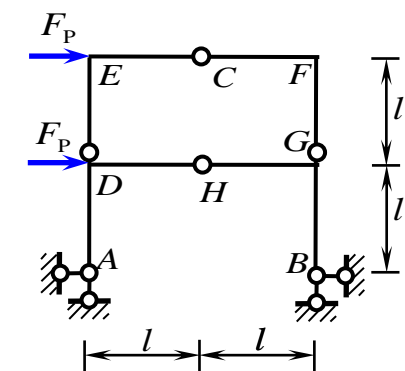
【例题47】弯矩图。（三刚片基附2-8）



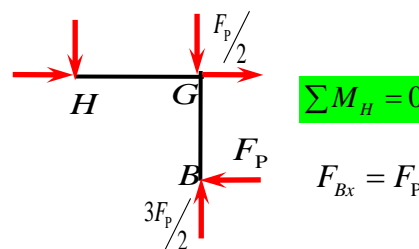
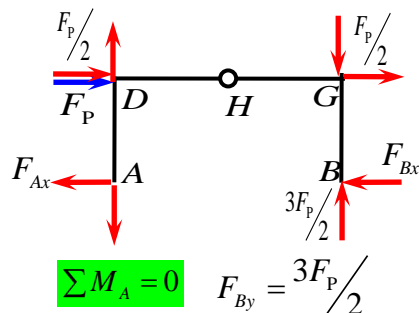
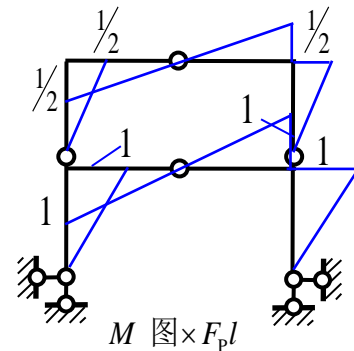
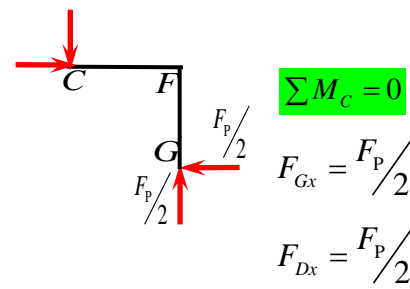
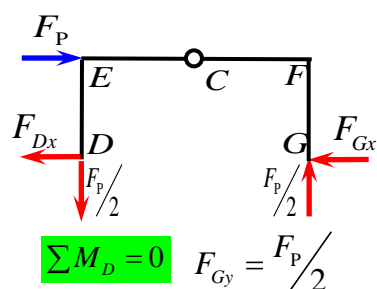
【例题48】弯矩图。（三刚片基附2-14）



【例题49】弯矩图。（三刚片基附2-17）



基附型结构，先附后基

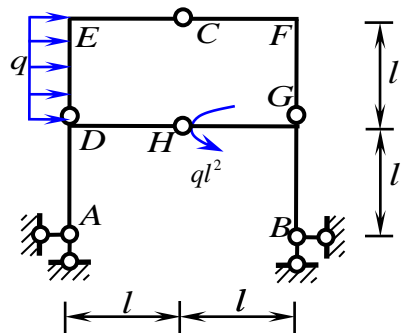


整体隔离体：

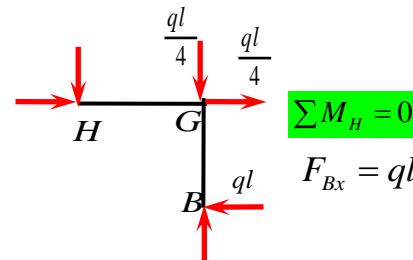
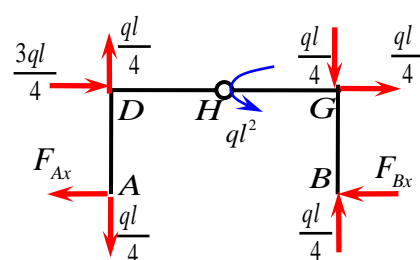
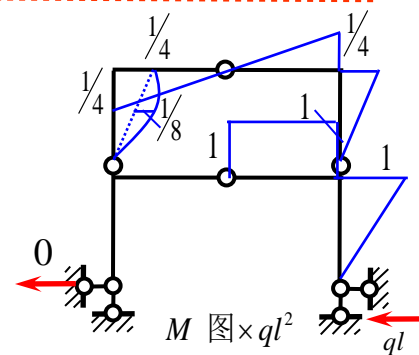
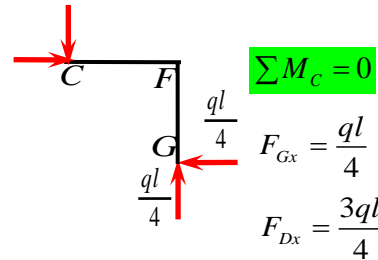
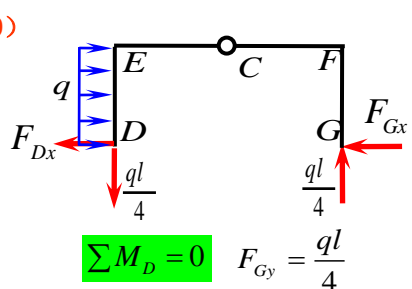
$$\sum F_x = 0$$

$$F_{Ax} = F_P$$

【例题50】弯矩图。（三刚片基附2-20）



基附型结构，先附后基



整体隔离体：

$$\sum F_x = 0$$

$$F_{Ax} = 0$$

【例题51】弯矩图。（三刚片基附2-1）

【例题52】弯矩图。（三刚片基附2-2）

【例题53】弯矩图。（三刚片基附2-3）

基附型结构，先附后基

取整体隔离体

基本部分为三刚片组成，取两个隔离体，求支座反力

隔离体1	$\sum M_c = 0$	$F_{Ax} = ql$
隔离体2	$\sum F_y = 0$	$F_{Cy} = 2ql$
	$\sum F_x = 0$	$F_{Ay} = \frac{3ql}{2}$

