

	$\frac{FL}{8}$ $-\frac{FL}{8}$	$\frac{3}{16}FL$ $\times$	$\times$ $-\frac{3}{16}FL$
	$-\frac{F}{2}$ $-\frac{F}{2}$	$-\frac{11F}{16}$ $-\frac{5F}{16}$	$-\frac{5F}{16}$ $-\frac{11F}{16}$
	$\frac{fL^2}{12}$ $-\frac{fL^2}{12}$	$\frac{fL^2}{8}$ $\times$	$\times$ $-\frac{fL^2}{8}$
	$-\frac{fL}{2}$ $-\frac{fL}{2}$	$-\frac{5fL}{8}$ $-\frac{3fL}{8}$	$-\frac{3fL}{8}$ $-\frac{5fL}{8}$
	$\frac{fL^2}{30}$ $-\frac{fL^2}{20}$	$\frac{7fL^2}{120}$ $\times$	$\times$ $-\frac{fL^2}{15}$
	$-\frac{3fL}{20}$ $-\frac{7fL}{20}$	$-\frac{27fL}{120}$ $-\frac{33fL}{120}$	$-\frac{fL}{10}$ $-\frac{2fL}{5}$
	$\frac{EI}{h}\alpha_t\Delta t$ $-\frac{EI}{h}\alpha_t\Delta t$	$\frac{3}{2}\frac{EI}{h}\alpha_t\Delta t$ $\times$	$\times$ $-\frac{3}{2}\frac{EI}{h}\alpha_t\Delta t$
	0                      0	$-\frac{3EI}{2hL}\alpha_t\Delta t$ $\frac{3EI}{2hL}\alpha_t\Delta t$	$\frac{3EI}{2hL}\alpha_t\Delta t$ $-\frac{3EI}{2hL}\alpha_t\Delta t$
	$\frac{Fab^2}{L^2}$ $-\frac{Fa^2b}{L^2}$	$\frac{Fab}{2L^2}(b+L)$ $\times$	$\times$ $-\frac{Fab}{2L^2}(a+L)$
	$\frac{Fb}{L}\left(\frac{a(a-b)}{L^2}-1\right)$ $\frac{Fa}{L}\left(\frac{b(b-a)}{L^2}-1\right)$	$-\frac{Fb}{L}\left(\frac{a(b+L)}{2L^2}+1\right)$ $\frac{Fa}{L}\left(\frac{b(b+L)}{2L^2}-1\right)$	$\frac{Fb}{L}\left(\frac{a(a+L)}{2L^2}-1\right)$ $-\frac{Fa}{L}\left(\frac{b(b+L)}{2L^2}+1\right)$
	$\frac{Mb}{L^2}(2L-3b)$ $\frac{Ma}{L^2}(2L-3a)$	$\frac{M}{2L^2}(L^2-3b^2)$ $\times$	$\times$ $\frac{M}{2L^2}(L^2-3a^2)$
	$-\frac{M}{L}\left(1+\frac{b(2L-3b)+a(2L-3a)}{L}\right)$ $\frac{M}{L}\left(1+\frac{b(2L-3b)+a(2L-3a)}{L}\right)$	$-\frac{M}{L}\left(1+\frac{L^2-3b^2}{2L^2}\right)$ $\frac{M}{L}\left(1+\frac{L^2-3b^2}{2L^2}\right)$	$-\frac{M}{L}\left(1+\frac{L^2-3a^2}{2L^2}\right)$ $\frac{M}{L}\left(1+\frac{L^2-3a^2}{2L^2}\right)$

$M_{ab} = \bar{M}_{ab} + k \left( 2\varphi_a + \varphi_b + 3\frac{w_b^l - w_a^l}{L} \right)$ $k = \frac{2EI}{L}$	$M_{ab} = \bar{M}_{ab} + \frac{3k}{2} \left( \varphi_a + \frac{w_b^l - w_a^l}{L} \right)$	$\times$
$M_{ba} = \bar{M}_{ba} + k \left( \varphi_a + 2\varphi_b + 3\frac{w_b^l - w_a^l}{L} \right)$	$\times$	$M_{ba} = \bar{M}_{ba} + \frac{3k}{2} \left( \varphi_b + \frac{w_b^l - w_a^l}{L} \right)$
$Z_{ab}^l = \bar{Z}_{ab}^l - \frac{3k}{L} \left( \varphi_a + \varphi_b + 2\frac{w_b^l - w_a^l}{L} \right)$	$Z_{ab}^l = \bar{Z}_{ab}^l - \frac{3k}{2L} \left( \varphi_a + \frac{w_b^l - w_a^l}{L} \right)$	$Z_{ab}^l = \bar{Z}_{ab}^l - \frac{3k}{2L} \left( \varphi_b + \frac{w_b^l - w_a^l}{L} \right)$
$Z_{ba}^l = \bar{Z}_{ba}^l + \frac{3k}{L} \left( \varphi_a + \varphi_b + 2\frac{w_b^l - w_a^l}{L} \right)$	$Z_{ba}^l = \bar{Z}_{ba}^l + \frac{3k}{2L} \left( \varphi_a + \frac{w_b^l - w_a^l}{L} \right)$	$Z_{ba}^l = \bar{Z}_{ba}^l + \frac{3k}{2L} \left( \varphi_b + \frac{w_b^l - w_a^l}{L} \right)$
$X_{ab}^l = \bar{X}_{ab}^l - n(u_b^l - u_a^l)$ $n = \frac{EA}{L}$	$X = X^l \cos \alpha - Z^l \sin \alpha$ $u^l = u \cos \alpha + w \sin \alpha$	$w^l = -u \sin \alpha + w \cos \alpha$
$X_{ba}^l = \bar{X}_{ab}^l + n(u_b^l - u_a^l)$	$Z = X^l \sin \alpha + Z^l \cos \alpha$	

