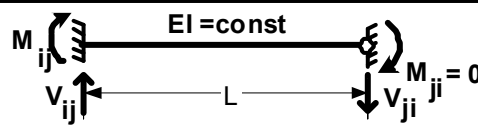
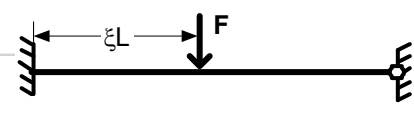
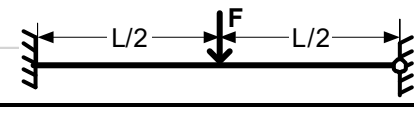
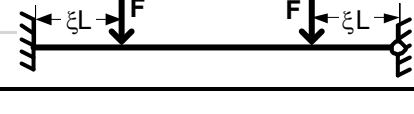
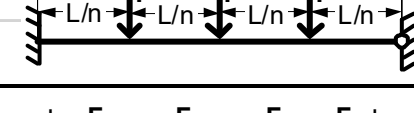
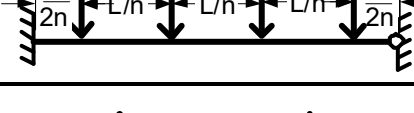
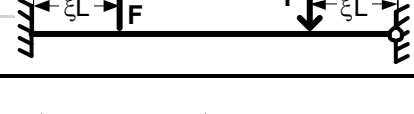
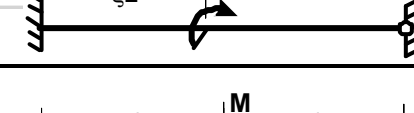

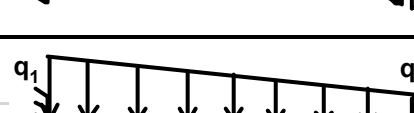
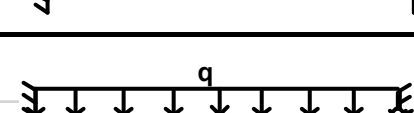
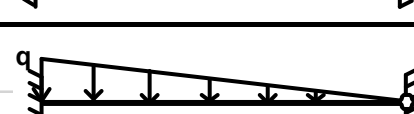
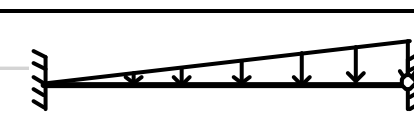
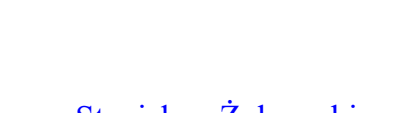
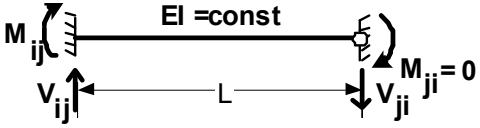
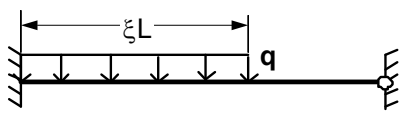
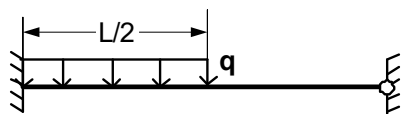
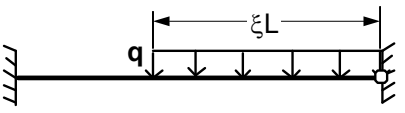
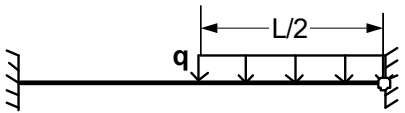
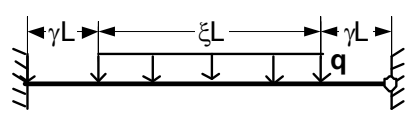
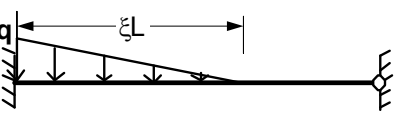
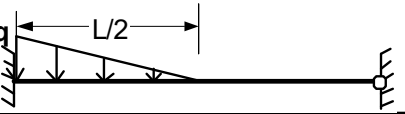
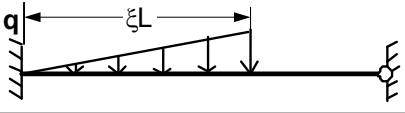
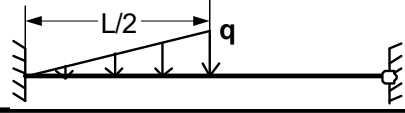
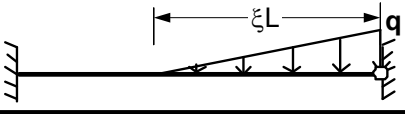
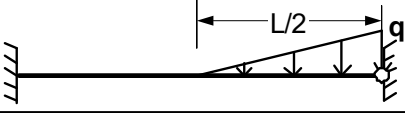
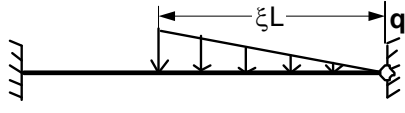
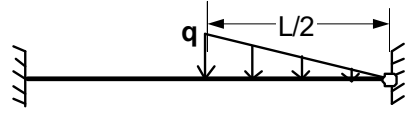
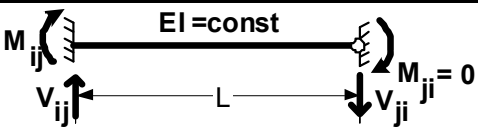
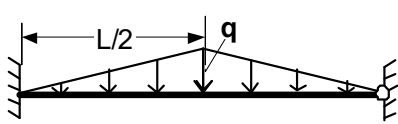
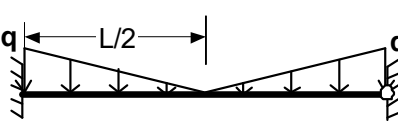
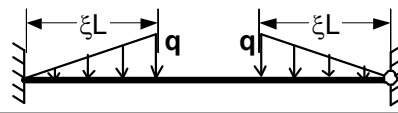
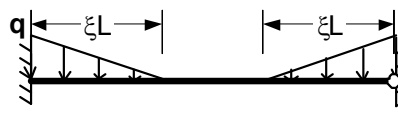
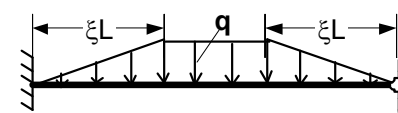
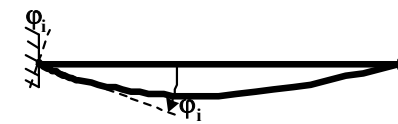
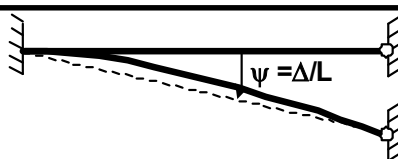
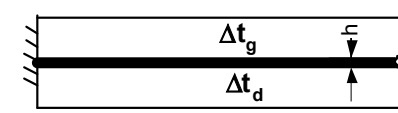
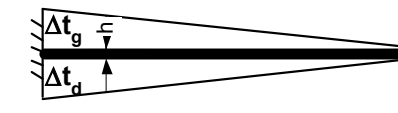
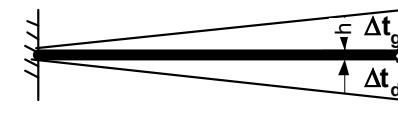
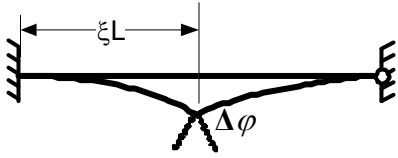
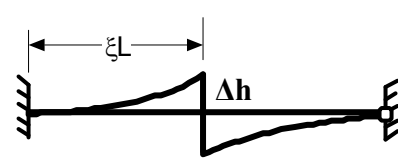


**MOMENTY I SIŁY BRZEGOWE**  
**PRĘT LEWOSTRONNIE UTWIERDZONY**  
**PRAWOSTRONNIE PODPARTY PRZEGUBOWO**

$M_{ij}$ $V_{ij}$		$V_{ji}$
$M_{ij} = -FL\xi(1-\xi)(1-\xi/2)$ $V_{ij} = F(1-\xi)(1+\xi-\xi^2/2)$		$V_{ji} = -F\xi^2(3-\xi)/2$
$M_{ij} = -3FL/16$ $V_{ij} = 11F/16$		$V_{ji} = -5F/16$
$M_{ij} = -3FL\xi(1-\xi)/2$ $V_{ij} = F(3\xi(1-\xi)/2 + 1)$		$V_{ji} = F(3\xi(1-\xi)/2 - 1)$
$M_{ij} = -FL(n-1/n)/8$ $V_{ij} = F(5n-1/n-4)/8$		$V_{ji} = -F(3n+1/n-4)/8$
$M_{ij} = -FL(n+0.5/n)/8$ $V_{ij} = F(5n+0.5/n)/8$		$V_{ji} = -F(3n-0.5/n)/8$
$M_{ij} = FL\xi(1-\xi^2)/8$ $V_{ij} = -F\xi(9-\xi^2)/8$		$V_{ji} = -F\xi(9-\xi^2)/8$
$M_{ij} = M(-1+3\xi-3\xi^2/2)$ $V_{ij} = -3M \cdot \xi(1-\xi/2)/L$		$V_{ji} = -3M \cdot \xi(1-\xi/2)/L$
$M_{ij} = M/8$ $V_{ij} = -(9/8)M/L$		$V_{ji} = -(9/8)M/L$
$M_{ij} = M/2$ $V_{ij} = -1.5M/L$		$V_{ji} = -1.5M/L$
$M_{ij} = -(8q_1+7q_2)L^2/120$ $V_{ij} = (16q_1+9q_2)L/40$		$V_{ji} = -(4q_1+11q_2)L/40$
$M_{ij} = -qL^2/8$ $V_{ij} = 5qL/8$		$V_{ji} = -3qL/8$
$M_{ij} = -qL^2/15$ $V_{ij} = 2qL/5$		$V_{ji} = -qL/10$
$M_{ij} = -7qL^2/120$ $V_{ij} = 9qL/40$		$V_{ji} = -11qL/40$

$M_{ij}$ $V_{ij}$		$V_{ji}$
$M_{ij} = -qL^2 \xi^2 (2 - \xi)^2 / 8$ $V_{ij} = qL \xi [1 - \xi^2 (1 - \xi/4) / 2]$		$V_{ji} = -qL \xi^3 (1 - \xi/2) / 2$
$M_{ij} = -9qL^2 / 128$ $V_{ij} = 57qL / 128$		$V_{ji} = -7qL / 128$
$M_{ij} = -qL^2 \xi^2 (2 - \xi^2) / 8$ $V_{ij} = qL \xi^2 (6 - \xi^2) / 8$		$V_{ji} = -qL \xi [1 - \xi (6 - \xi^2) / 8]$
$M_{ij} = -7qL^2 / 128$ $V_{ij} = 23qL / 128$		$V_{ji} = -41qL / 128$
$M_{ij} = -qL^2 \xi (3 - \xi^2) / 16$ $V_{ij} = qL \xi (11 - \xi^2) / 16$		$V_{ji} = -qL \xi (5 + \xi^2) / 16$
$M_{ij} = -qL^2 \xi^2 [20 - 3\xi(5 - \xi)] / 120$ $V_{ij} = qL \xi [1/2 - \xi^2 (5 - \xi) / 40]$		$V_{ji} = -qL \xi^3 (5 - \xi) / 40$
$M_{ij} = -53qL^2 / 1720$ $V_{ij} = 151qL / 640$		$V_{ji} = -9qL / 640$
$M_{ij} = -qL^2 \xi^2 [40 - 3\xi(15 - 4\xi)] / 120$ $V_{ij} = qL \xi [1/2 - \xi^2 (15 - 4\xi) / 40]$		$V_{ji} = -qL \xi^3 (15 - 4\xi) / 40$
$M_{ij} = -41qL^2 / 960$ $V_{ij} = 67qL / 320$		$V_{ji} = -13qL / 320$
$M_{ij} = -qL^2 \xi^2 (10 - 3\xi^2) / 120$ $V_{ij} = -qL \xi^2 (10 - \xi^2) / 40$		$V_{ji} = -qL \xi [1/2 - \xi (10 - \xi^2) / 40]$
$M_{ij} = -17qL^2 / 960$ $V_{ij} = 39qL / 640$		$V_{ji} = -121qL / 640$
$M_{ij} = -qL^2 \xi^2 (5 - 3\xi^2) / 30$ $V_{ij} = -qL \xi^2 (5 - \xi^2) / 10$		$V_{ji} = -qL \xi [1/2 - \xi (5 - \xi^2) / 10]$
$M_{ij} = -17qL^2 / 480$ $V_{ij} = 19qL / 160$		$V_{ji} = -21qL / 160$

$M_{ij}$ $V_{ij}$		$V_{ji}$
$M_{ij} = -5qL^2 / 64$ $V_{ij} = 21qL / 64$		$V_{ji} = -11qL / 64$
$M_{ij} = -3qL^2 / 64$ $V_{ij} = 19qL / 64$		$V_{ji} = -13qL / 64$
$M_{ij} = -qL^2 \xi^2 (4 - 3\xi) / 8$ $V_{ij} = -qL \xi [4 + \xi (4 - 3\xi)] / 8$		$V_{ji} = -qL \xi [4 - \xi (4 - 3\xi)] / 8$
$M_{ij} = -qL^2 \xi^2 (2 - \xi) / 8$ $V_{ij} = qL [1/2 + \xi (2 - \xi) / 8]$		$V_{ji} = -qL \xi [1/2 - \xi (2 - \xi) / 8]$
$M_{ij} = -qL^2 [1 - \xi^2 (2 - \xi)] / 8$ $V_{ij} = qL [5 - 4\xi - \xi^2 (4 - \xi)] / 8$		$V_{ji} = -qL [8 - 4\xi + \xi^2 (2 - \xi)] / 8$
$M_{ij} = 3EI\phi_i / L$ $V_{ij} = -3EI\phi_i / L^2$		$V_{ji} = -3EI\phi_i / L^2$
$M_{ij} = -3EI\psi / L$ $V_{ij} = 3EI\psi / L^2$		$V_{ji} = 3EI\psi / L^2$
$M_{ij} = -1.5EI\alpha_T (\Delta t_d - \Delta t_g) / h$ $V_{ij} = 1.5EI\alpha_T (\Delta t_d - \Delta t_g) / (Lh)$		$V_{ji} = 1.5EI\alpha_T (\Delta t_d - \Delta t_g) / (Lh)$
$M_{ij} = -EI\alpha_T (\Delta t_d - \Delta t_g) / h$ $V_{ij} = EI\alpha_T (\Delta t_d - \Delta t_g) / (Lh)$		$V_{ji} = EI\alpha_T (\Delta t_d - \Delta t_g) / (Lh)$
$M_{ij} = -0.5EI\alpha_T (\Delta t_d - \Delta t_g) / h$ $V_{ij} = 0.5EI\alpha_T (\Delta t_d - \Delta t_g) / (Lh)$		$V_{ji} = 0.5EI\alpha_T (\Delta t_d - \Delta t_g) / (Lh)$
$M_{ij} = -3 \frac{EI}{L} \cdot (1 - \xi) \cdot \Delta\phi$ $V_{ij} = 3 \frac{EI}{L^2} \cdot (1 - \xi) \cdot \Delta\phi$		$V_{ji} = 3 \frac{EI}{L^2} \cdot (1 - \xi) \cdot \Delta\phi$
$M_{ij} = 3 \frac{EI}{L^2} \cdot \Delta h$ $V_{ij} = -3 \frac{EI}{L^3} \cdot \Delta h$		$V_{ji} = -3 \frac{EI}{L^3} \cdot \Delta h$