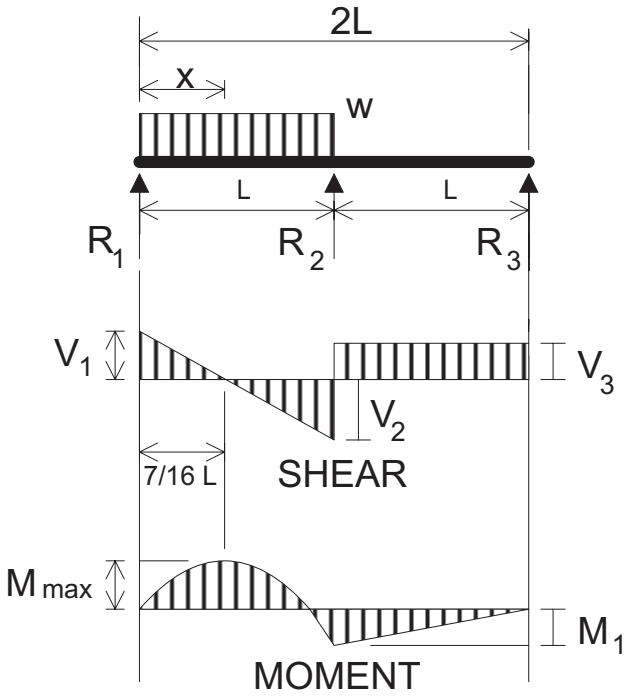


$R_1 = V_1 = \frac{7}{16} wL$

$R_2 = V_2 + V_3 = \frac{5}{8} wL$

$R_3 = V_3 = -\frac{1}{16} wL$

$V_2 = \frac{9}{16} wL$

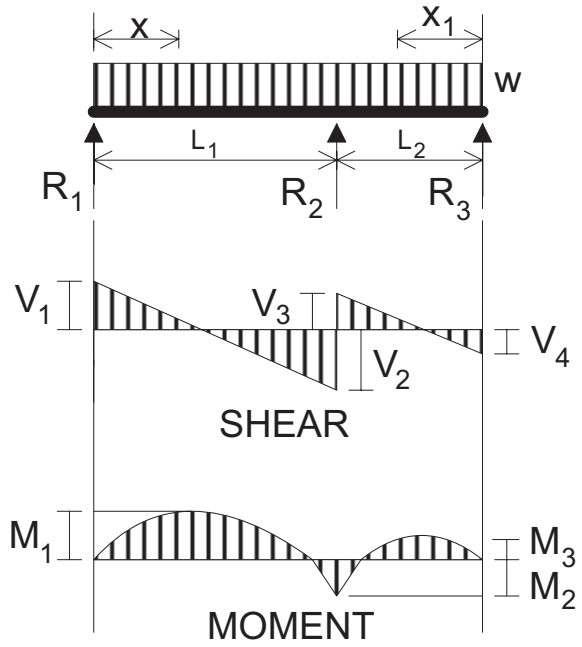
M_{max} [at $x = \frac{7}{16} L$] $= \frac{49}{512} wL^2$

M_1 [at R_2] $= -\frac{1}{16} wL^2$

M_x [at $x < L$] $= \frac{wx}{16} (7L - 8x)$

Δ_{max} [at $x \cong 0.47L$] $= \frac{wL^4}{109EI}$

Figure A.16 - Continuous Beam - Two Equal Spans with Uniform Load on One Span



$R_1 = V_1 = \frac{M_1}{L_1} + \frac{wL_1}{2}$

$R_2 = wL_1 + wL_2 - R_1 - R_3$

$R_3 = V_4 = \frac{M_1}{L_1} + \frac{wL_2}{2}$

$V_2 = wL_1 - R_1$

$V_3 = wL_2 - R_3$

M_1 [at $x < L_1$, max. at $x = \frac{R_1}{w}$] $= R_1x = \frac{wx^2}{2}$

$M_2 = -\frac{wL_2^3 + wL_1^3}{8(L_1 + L_2)}$

M_3 [at $x_1 < L_2$, max. at $x_1 = \frac{R_3}{w}$] $= R_3x_1 - \frac{wx_1^2}{2}$

Figure A.17 - Continuous Beam - Two Unequal Spans and Uniformly Distributed Load