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ARCH 324 - Structures 2, Winter 2009

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\[ \Theta = -144 + 320 + 576 - M_8 \]
\[ M_8 = 752, \quad M = 94 \, \text{k}-\text{l} \]

\[ R_R = -1.5 \cdot 6 + 12 + 3.917 = 20.42 \, \text{k} \]

\[ R_L = (1.5 \cdot 6) + 3 + 12 - 3.917 = 18.58 \, \text{k} \]

\[ \Theta_{\text{TOTAL}} = 39.00 \, \text{k} \]

**Applied Load**

\[ -6 - 9 - 24 = -39 \, \text{k} \, \checkmark \]
\[ 37.28 = x \times 12.42 + \frac{x^2}{2} \]

\[ x^2 + 24.84x - 74.56 = 0 \]

\[ x = 2.707 \]