# CE 525 Fall 2026 HW#7

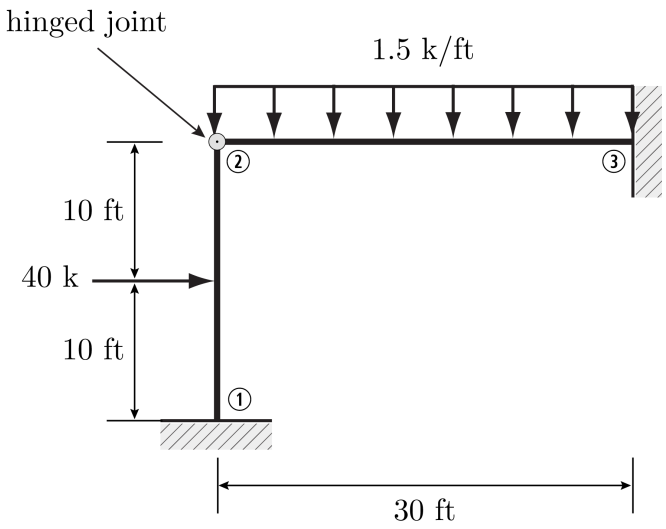
Due Tuesday, November 17, at the beginning of class

1. For the plane frame shown determine joint displacements, local member-end forces, and support reactions using the Matrix Displacement Method:

a. (10 pts) By implementing Approach 1 (elimination of rotational DOFs) via computer programming

b. (10 pts) By implementing Approach 2 (retention of one rigid connection) via computer programming

c. (10 pts) Using SAP2000




for all members:
$E = 29{,}000$ ksi
$A = 10.3$ in.$^2$
$I = 510$ in.$^4$