Department of Civil and Environmental Engineering

CIVE 4320/5320 – Computer-Aided Analysis of Structures
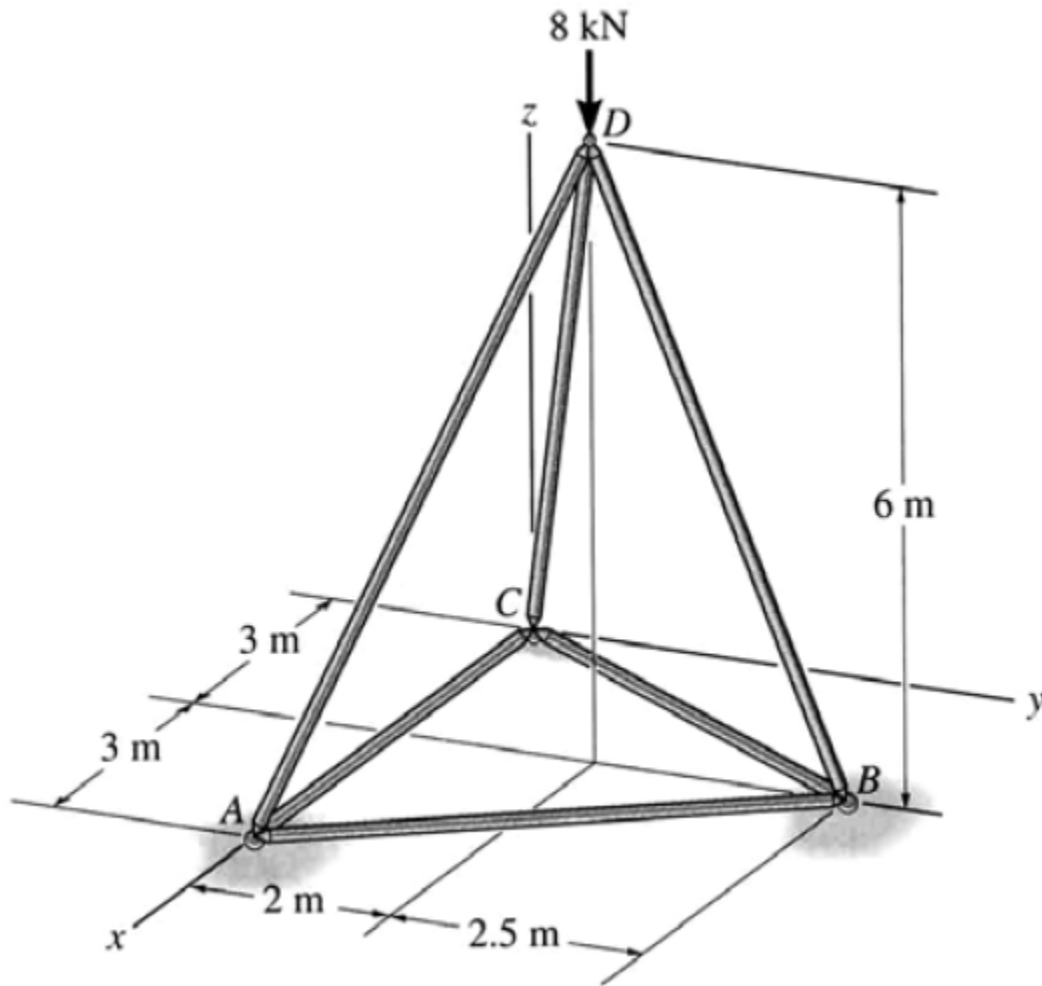Tutorial 5 Example (Matrix Stiffness Method: 3D Trusses)

The space truss ABCD is supported by rollers at points A, B, and C. A load of 8 kN acts vertically downward at point D.

Determine:
a) The reaction forces at each roller;
b) The internal forces in all 6 truss members.

E = 200 GPa
A = 6000 mm^2