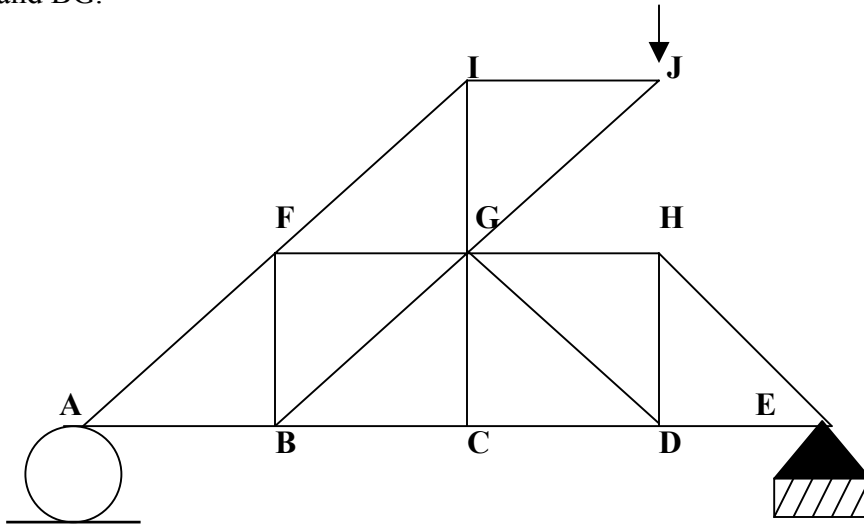


Your Name: _____
Partner's Names: _____

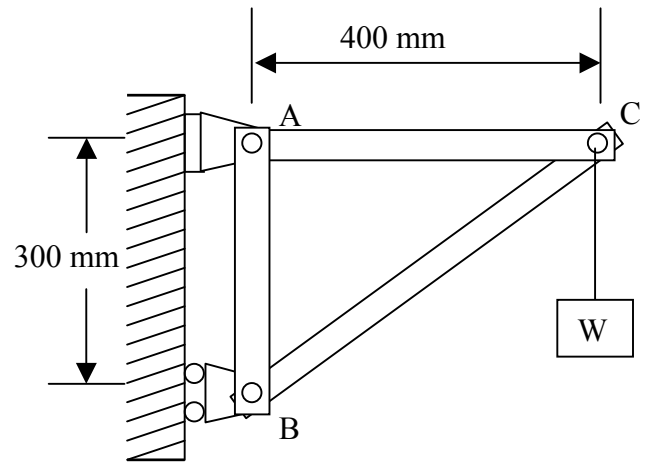
TRUSSES AND FRAMES

Part 1: For the truss shown, assume that the applied force has a magnitude of 100 Newtons and that the length of every horizontal and vertical member is 2 meters.

- Compute** the external reactions at points A and E. Show the direction and magnitude of each reaction on the drawing.
- Label each member on the sketch below as being in compression [C], tension [T], or as a zero-force member [0].
- Build the truss and verify your predictions.
- Using the method of sections**, compute the magnitude of force in truss members CD and BG.



Part 2a: For the structure shown below, draw complete free body diagrams for each member and pin. Also, determine the forces acting on member AC and show their direction and magnitude on the sketch. $W = 12 \text{ kN}$.



Part 2b: For the structure shown below, draw complete free body diagrams for each member and pin. Also, determine the forces acting on member AC and show their direction and magnitude on the sketch. $W = 12 \text{ kN}$.

