Answer the following questions:
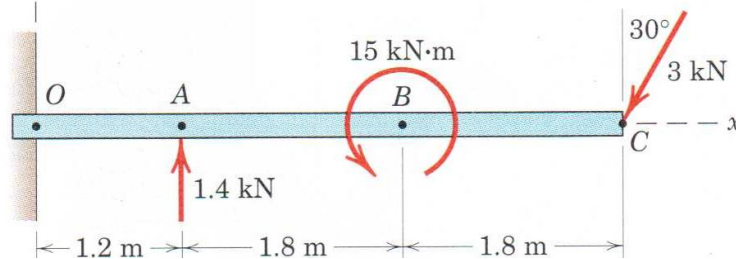
Question One: (3 marks)

Determine and locate the resultant R of the two forces and one couple moment acting on the beam.
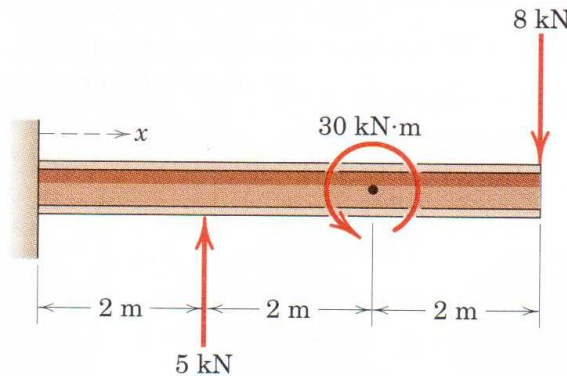
Question Two: (3 marks)

The 500 kg uniform beam is subjected to the three external loads shown. Compute the reactions at the support at point O.

Question Three: (4 marks)

Determine the force in each member of the loaded truss and specify whether they are in tension or in compression.