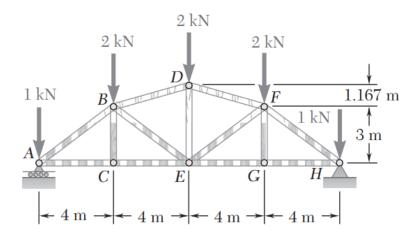
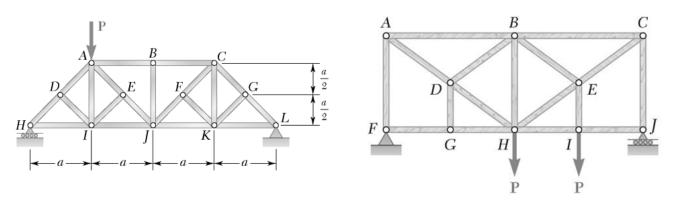
## **Tutorial (Date: 02/06/2023)**

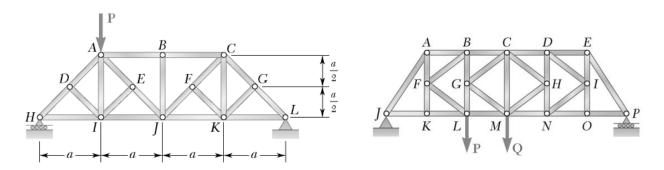
Q.1 Determine the force in each member of the Gambrel roof truss shown below. Indicate whether each member is in tension (T) or compression (C).



Q.2 Determine whether the trusses below are simple trusses or not.



Q.3 For the given loading conditions, determine the zero-force members of the trusses shown below.



- Q.4 A Warren bridge truss is loaded as shown below. Determine the force in members *CE*, *DE*, and *DF*.
- Q.5 For each structures shown below, comment which one is completely or improperly constrained. For completely constrained one, further comment whether the structures are determinate or indeterminate.

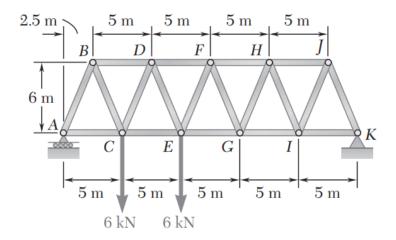


Figure for **Question 4** 

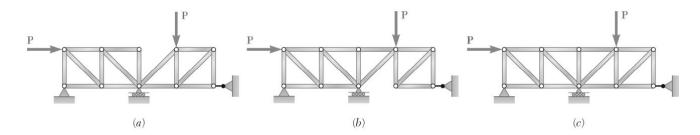


Figure for **Question 5**