

Announcements

- Mid-semester evaluation this week during discussion sections

□ Upcoming deadlines:

- Tuesday (10/2)
 - PL HW
- Friday (10/5)
 - Written Assignment



National Fire Pup Day

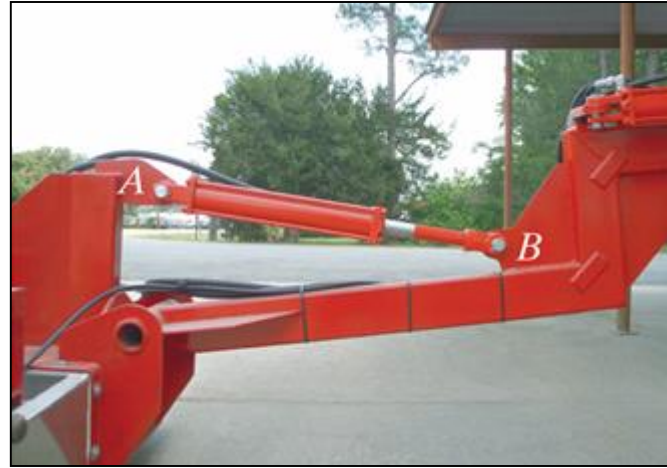
www.NationalDayCalendar.com

October 1

Objectives

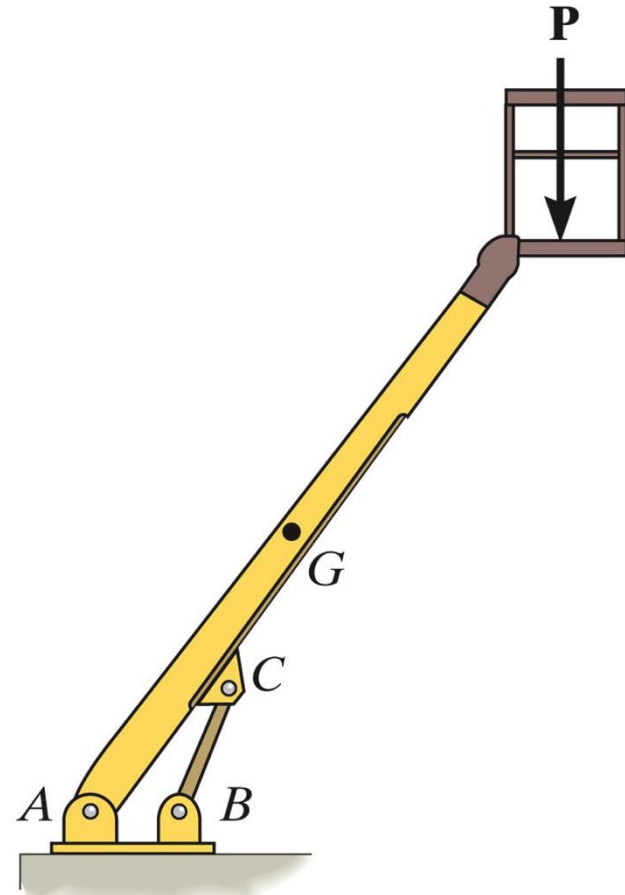
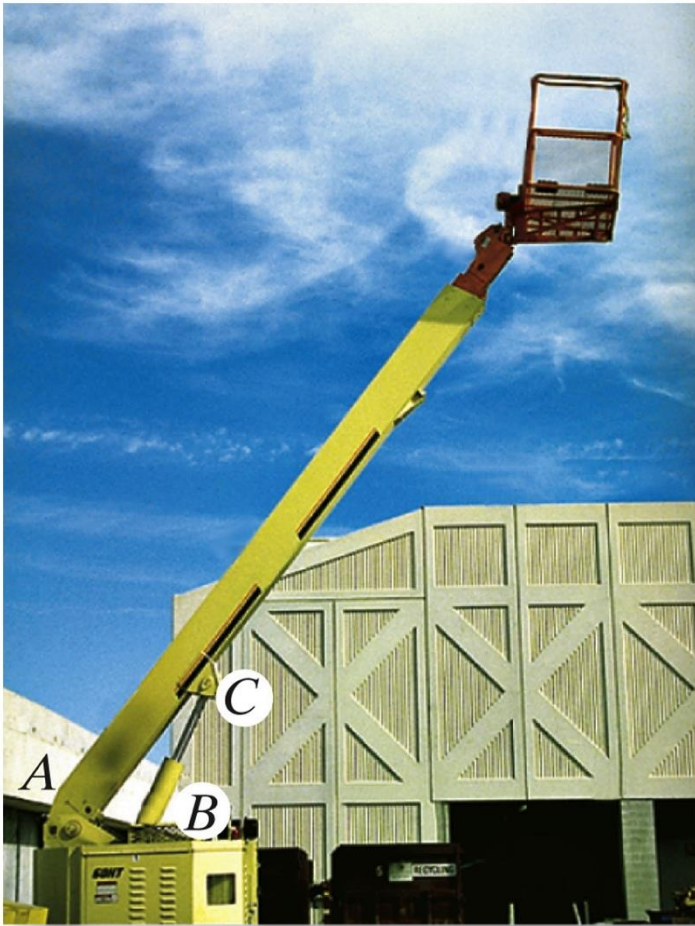
- Two-force members
- Three-force members
- Reaction vs. resultant force/moment

Two-force members



In the cases above, members AB can be considered as two-force members, provided that their weight is neglected.

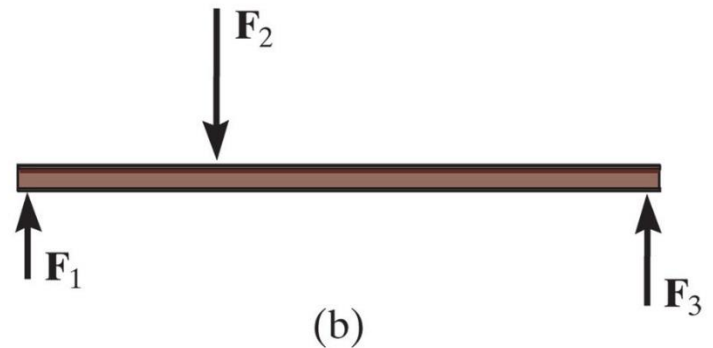
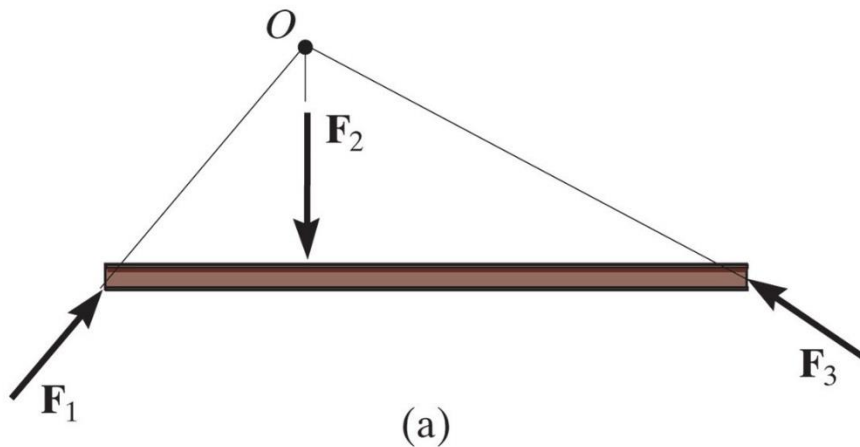
Find the support reactions at A , given the force applied at the cage, P , is 300 lb.



Three-force members

As the name implies, three-force members have forces applied at only three points.

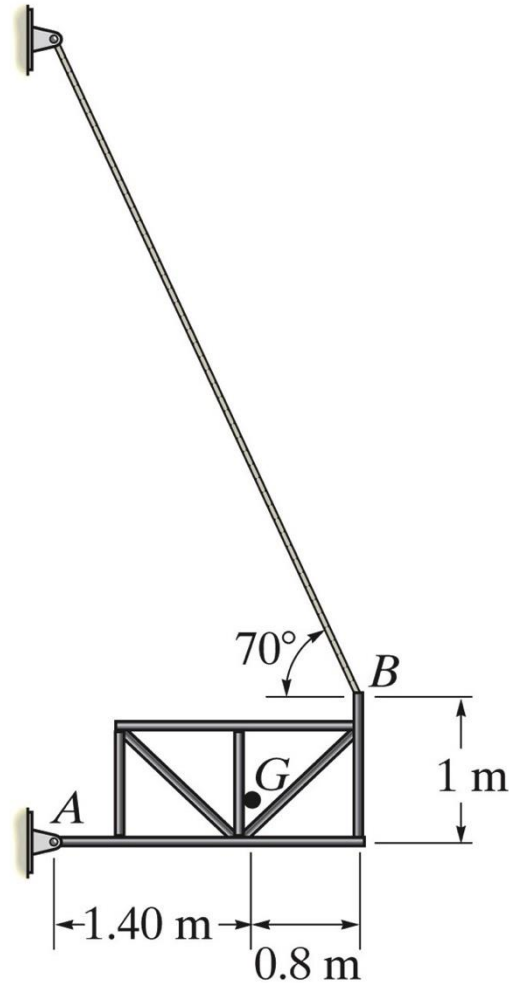
Moment equilibrium can be satisfied only if the three forces are concurrent or parallel force system



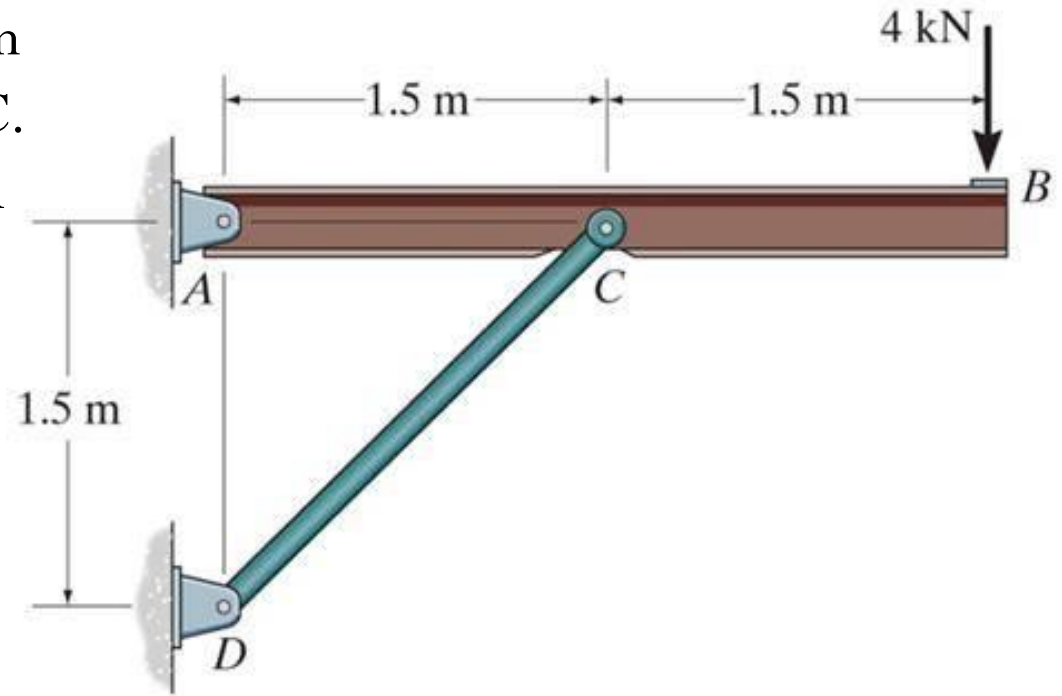
Three-force member

Example

The platform has a mass of 200 kg. Find the support reactions.



Given the load at B of the beam is supported by pins at A and C. Find the support reactions at A and C.



The uniform rod AB has a mass of 40 kg. Determine the force in the cable when the rod is in the position shown. There is a smooth collar at A .

