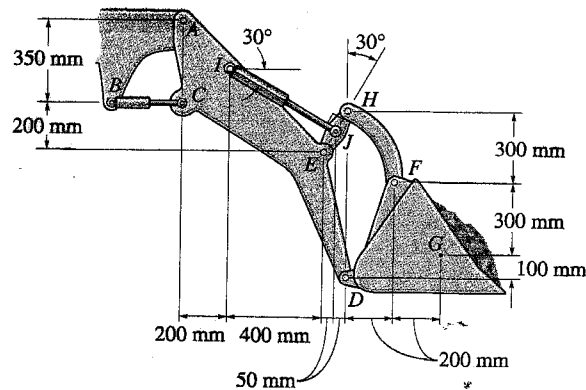
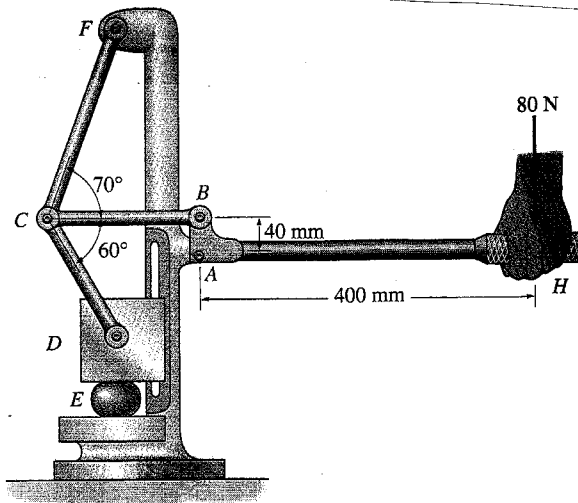


- 9A. The tractor shovel carries a 5000 N load of soil acting at point G. The bucket is connected to the rest of the tractor frame by pins at D and F.
- Draw a FBD of the bucket.
  - Solve for the forces acting on the bucket at points D and F.
  - Write the forces at pins D and F as Cartesian vectors.



- 9B. A clamp mechanism develops a large clamping force at point E when a relatively small force is applied on the handle at H. Determine the forces acting on the handle (HAB) at points A and B which are pins. Write the forces at points A and B as Cartesian vectors.



- 9C The hoist is supporting an engine that weighs 1250 N. Determine the forces acting on the upper horizontal member at points E and F. All labeled points on the figure are pin connections. Write the forces at points E and F as Cartesian vectors.

