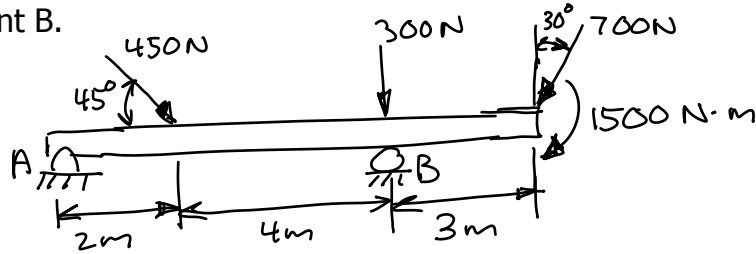


## Equivalent Systems

**Problem Statement:** Replace the force system with an equivalent resultant force and couple moment about point B.



- 1.) Draw the FBD.
- 2.) Resolve each force into components.
- 3.) Determine the resultant force and its direction.
- 4.) Determine the moment arms for each component.
- 5.) Determine the resultant moment.
- 6.) For a single equivalent force system, determine d.
- 7.) Draw the equivalent system.