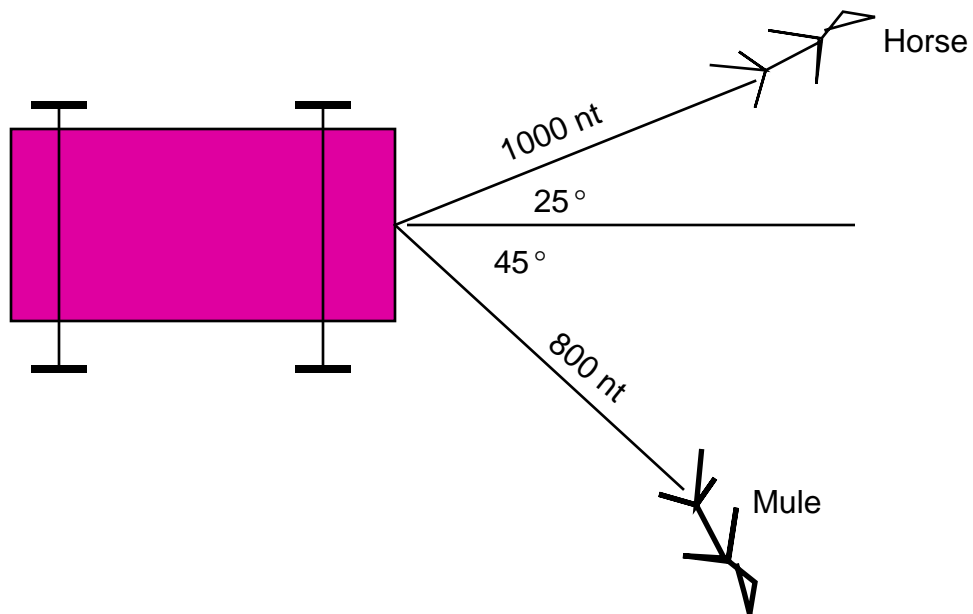


**Geophysics 150: Home set due Nov. 8, 2000**

1. The wheels on a wagon resolve forces into components parallel and perpendicular to the wagon. Only the parallel component drives motion in the desired direction. A horse and a mule are pulling on a wagon viewed from the top.



- Resolve the horse and mule vectors into components parallel and perpendicular to the wagon wheels.
- Find the net force driving the wagon forward.
- Instead take the horse direction and its perpendicular (crudely in the direction of the mule) as a coordinate system. Find the components of the horse, mule, and wagon forward vectors in this coordinate system.