

Work, Energy, and Simple Machines

Physics

Chpt 10 rev 2a

1. Brandon pulls a crate with a force of 65 N directed along a rope that makes an angle of 36° with the horizontal. What is the work done by Brandon if he pulls the box 12 m?
2. A ramp is 2.3 m long with a height of .90 m. You apply a 60. N of force to push a 11 kg box up the ramp. What is W_i , W_o , AMA, IMA, and Eff?
3. A ramp is 13 m long and 3.5 m high.
 - a) What force is needed to slide a 44 kg box to the top if friction is ignored?
 - b) What force is needed to slide the force up the ramp if the efficiency is 88%?
 - c) What is the AMA and IMA of the ramp?... (still 88% efficient)