

### Ch 10 Review Questions

1. A 10.0 N box is raised from the ground 3.2 m. How much work is done?
2. An ideal machine is used to lift an 20.0 N weight a distance of 7.3m. A force of 12.0 N is used. How far does the effort force move? Remember that an ideal machine, the work output equals the work input.
3. An effort force of 300.0 N is applied to an ideal machine. The effort force moves an 780.0 N object a distance of 240.0 cm. What is the mechanical advantage of the machine?
4. How much power is developed by a machine that moves a 480.0 N load 26 m in 15 s?
5. A machine requires a work input of 185 J to complete a job that uses 145 J. What is the efficiency of the machine?

6. A machine lifts a 278 kg object 110 m in 37 s. Find the power.

7. A box is pulled with a rope at an angle of  $27^\circ$  above the horizontal. The force is 57.0 N for a distance of 275 m. How much work is done?

8. At what speed can a 150.0 W crane lift a 2500.0 N load?

9 Do the following questions on p 278 in textbook.

35, 38-42, 44-46, 48-49.