Complete each sentence with the correct term from the Study Guide.

1. A combination of two or more simple machines is a(n) _____.

2. The ratio of the output force to the input force is the _____ of a machine.

What term indicates the number of times a machine multiplies the input force?

A) efficiency   C) mechanical advantage

B) power   D) resistance

Which factor increases as the efficiency of a machine increases?

A) work input   C) friction

B) work output   D) input force

Which cannot be done by a machine?
A) increase force
B) increase work
C) change direction of a force
D) increase velocity

An input force of 80 N is used to lift an object weighing 240 N with a system of pulleys. What is the mechanical advantage of the pulley system?

A. 2   C. 4
B. 3   D. 5

It takes 600 J of work to lift a crate straight up but 1,200 J to push that crate up a ramp to the same height. What is the efficiency of the ramp?

A. 30 percent   C. 75 percent
B. 50 percent   D. 200 percent