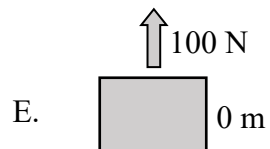
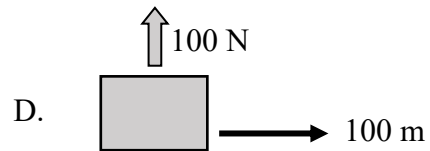
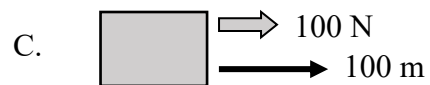
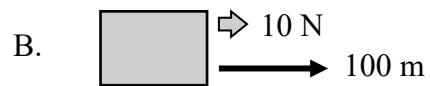
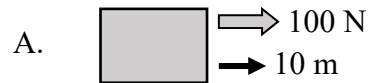

PHYS 1110 Worksheet: Work

1. Rank the following scenarios from least work done to most work done.



WORK

2. A luggage handler at the Laramie Airport pulls a 20-kg suitcase from rest up a ramp inclined at 25° above the horizontal with a force of 140 N parallel to the ramp. The coefficient of kinetic friction between the ramp and the box is $\mu_k = 0.30$. The suitcase travels 3.80 m along the ramp. Find:
- a. the work done on the suitcase by the handler
 - b. the work done on the suitcase by gravity
 - c. the work done on the suitcase by the normal force
 - d. the work done on the suitcase by friction
 - e. the total work done on the suitcase
 - f. the final speed of the suitcase