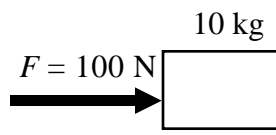


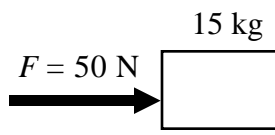
Force Pushing Box—Change in Kinetic Energy ⁷²

Various similar boxes are being pushed for 10 m across a floor by a *net* horizontal force as shown below. The mass of the boxes and the net horizontal force for each case are given in the indicated figures.

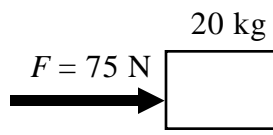
Rank the change in kinetic energy for each box from the greatest change in kinetic energy to the least change in kinetic energy. All boxes have an initial velocity of +10 m/s (+ direction is to the right and - to the left with $-4 < -2$).



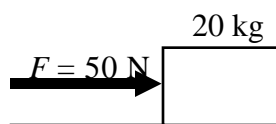
A



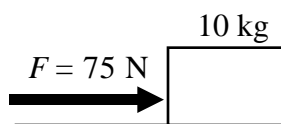
B



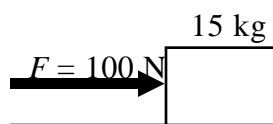
C



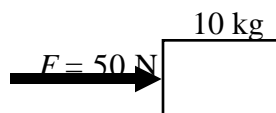
D



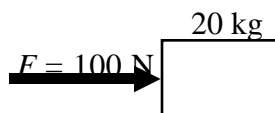
E



F



G



H

Greatest 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____ 8 _____ Least

Or, all changes in kinetic energy are the same. _____

Please carefully explain your reasoning.

How sure were you of your ranking? (circle one)

Basically Guessed

Sure

Very Sure

1 2 3 4 5 6 7 8 9 10

⁷² T. O’Kuma