The diagram below shows an 80 kg ice skater applying a force of 10 N to a 60 kg ice skater.


Which statement best describes the results of applying the 10 N force?
A. The skaters will not move at all.
B. The skaters will accelerate away from each other at the same rate.
C. The skaters will accelerate away from each other, but the 60 kg skater will accelerate at a faster rate.
D. The 60 kg skater will accelerate away from the 80 kg skater, and the 80 kg skater will remain stationary.

