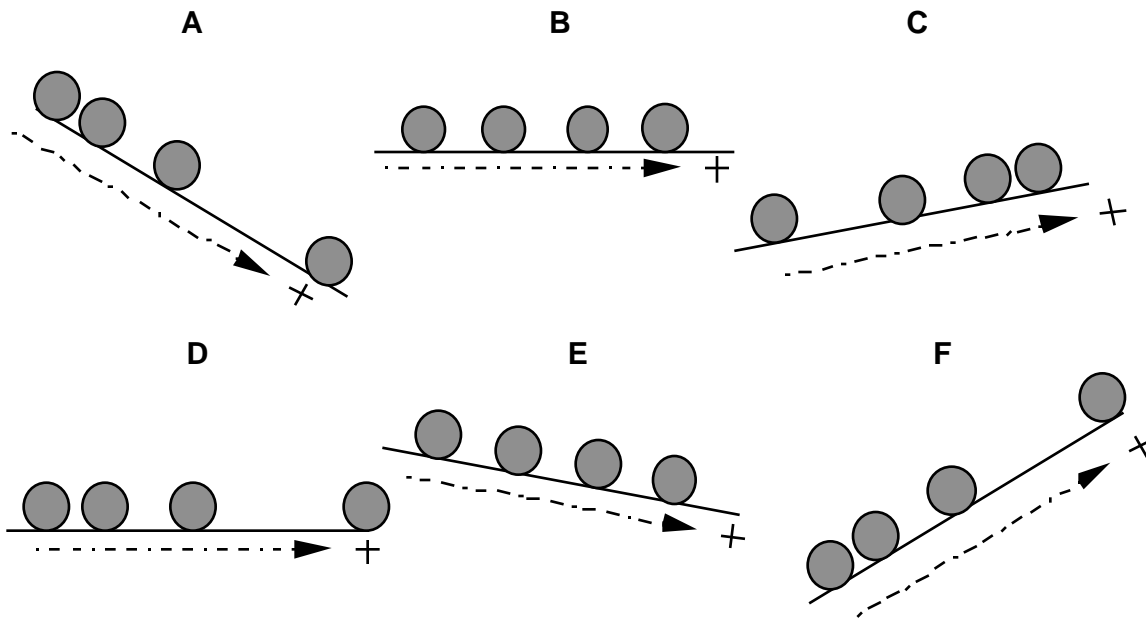


Ball Motion Diagram—Net Force ²³

The following drawings indicate the motion of a ball subject to one or more forces on various surfaces from left to right. Each circle represents the position of the ball at succeeding instants of time. Each time-interval between successive positions is equal, and each ball has the same mass.

Rank the net force on the ball in each case from the highest to the lowest net force based on the figures. Assume the acceleration for each situation to be constant. Note: Positive is to the right and zero is greater than negative.



Highest 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ Lowest

Or, all have the same net force (but not zero). _____

Or, the net force is zero for all of these. _____

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

²³ D. Maloney, T. O’Kuma