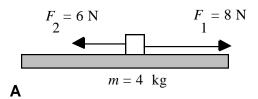
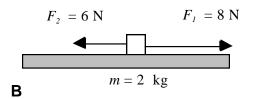
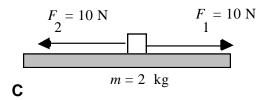
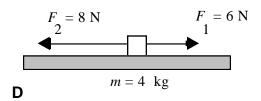
Forces on Objects on Smooth Surfaces—Velocity Change 32

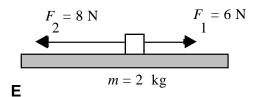
Two forces act on an object that is on a frictionless surface, as shown below. Rank these situations from greatest change in velocity to least change in velocity. (Note: All vectors directed to the right are positive, and those to the left are negative. Also, 0 m/s > -10 m/s.)

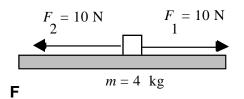












Greatest 1_____ 2___ 3____ 4___ 5___ 6___ Leas

Or, the change in velocity is the same in all cases. _____

Or, the velocity will not change in any of these situations. _____

4

Please carefully explain your reasoning.

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

Basically Guessed
1 2 3

Sure 5

6

7

8

9

Very Sure 10

³² R. Krupp