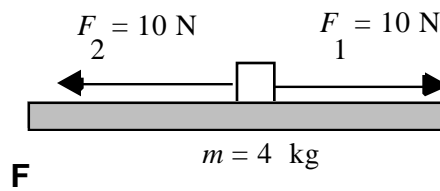
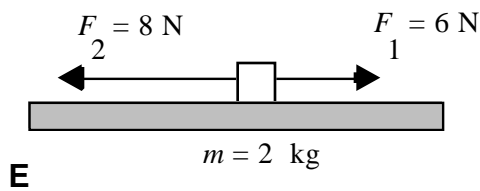
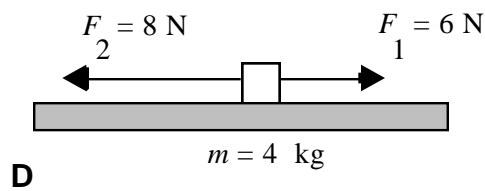
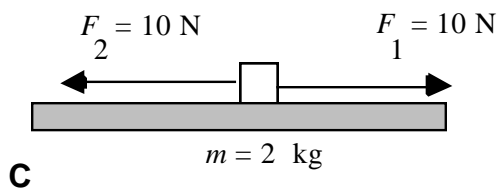
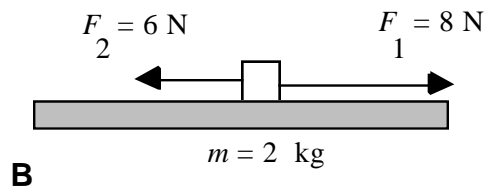
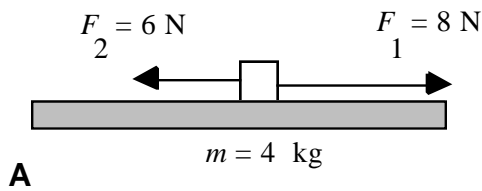


## Forces on Objects on Smooth Surfaces—Speed Change <sup>33</sup>

Two forces act on an object that is on a frictionless surface, as shown below. Rank these situations from greatest change in speed to least change in speed.



Greatest 1\_\_\_\_\_ 2\_\_\_\_\_ 3\_\_\_\_\_ 4\_\_\_\_\_ 5\_\_\_\_\_ 6\_\_\_\_\_ Least

Or, the change in speed is the same in all cases. \_\_\_\_\_

Or, the speed does not change for any of these cases. \_\_\_\_\_

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

<sup>33</sup> R. Krupp