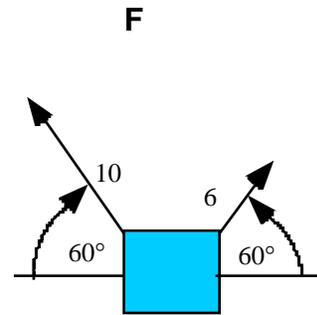
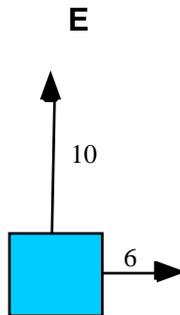
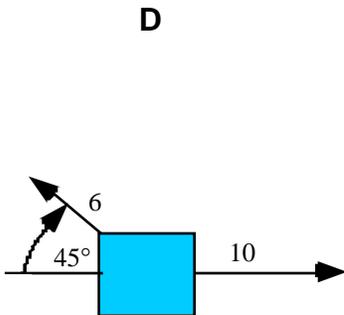
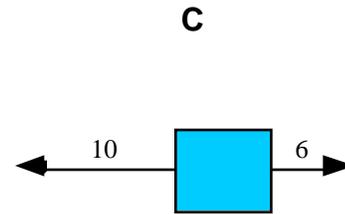
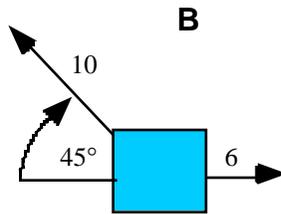
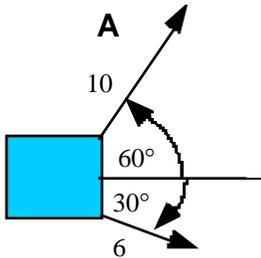


Two-Dimensional Forces on a Treasure Chest—Final Speed ¹⁷

The six figures below show treasure chests with two forces acting upon them. The lengths of the force vectors represent the magnitudes of the forces. Rank these situations from greatest to least with regard to the final speed of the treasure chest after 2 seconds. All chests start at rest. If you believe that two of the situations have the same final speed, place both of their letters at the same rank.



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

Or, all of these treasure chests have the same final speed. _____

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

¹⁷ K. W. Nicholson, D. Maloney, T. O’Kuma