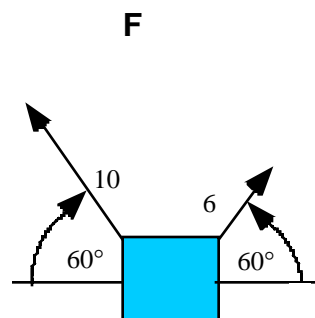
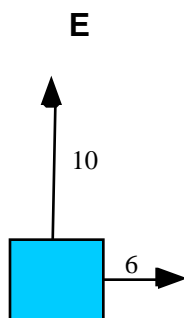
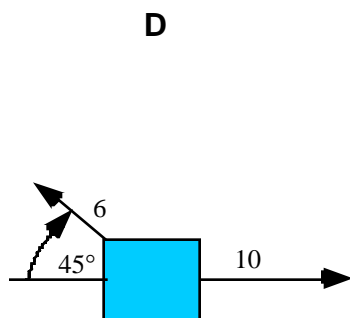
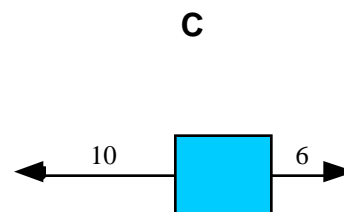
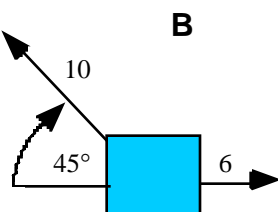
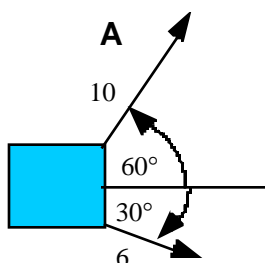


Two-Dimensional Forces on a Treasure Chest—Acceleration ¹⁸

The six figures below represent treasure chests with two forces acting on them. The lengths of the force vectors represent the magnitude of the force. Rank these situations from greatest to least with regard to the resulting magnitude of acceleration of the treasure chest. If you believe two situations have the same magnitude of acceleration, place both their letters at the same rank.



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

Or, all of these treasure chests have the same magnitude of acceleration. _____

Please carefully explain your reasoning.

How sure were you of your ranking?

Basically Guessed

Sure

Very Sure

1 2 3 4 5 6 7 8 9 10

¹⁸ K.W. Nicholson, D. Maloney, T. O’Kuma