

Physics 10154 - Quiz 1A

Three people are trying to slide a heavy metal box so that it moves at a constant speed across a horizontal surface toward the North. The net force required to do this is 475 N, directed North.

Person A pushes with a force of 182 Newtons in a direction 22.0° South of East.

Person B pushes with a force of 374 Newtons in a direction 65.0° North of West.

Person C must push with a force of what magnitude and direction to accomplish this task?