



STEP II, 2013, Q11 MS

Question 11.

The standard methods of conservation of momentum and the law of restitution will allow the speeds after the second collision to be deduced. A third collision would have to be between the first and second particles and this will only happen if the velocity of the first particle is greater than that of the second one.

Providing a good notation is chosen to avoid too much confusion, it is possible to find the velocities after the third collision and then consider the velocities of the second and third particles to determine whether or not there is a fourth collision.



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