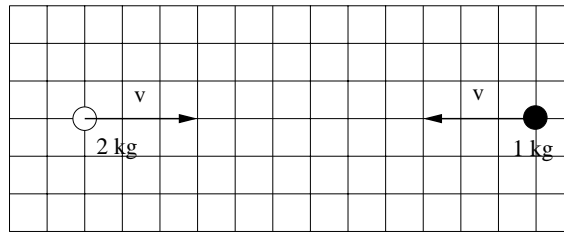


Names

Group



A white ball and a black ball are heading together as shown. The arrows represent (to scale!) the initial *velocities*. The white ball has a mass of 2 kg, while the black ball has a mass of 1 kg.

Question 1: What is the initial momentum of the system?

A 10x5 empty grid.

Question 2: Circle the diagram(s) allowed by momentum conservation

The vectors shown are velocity vectors. These are drawn to scale, but no detailed calculation is needed. There are no “close” situations, if it does not satisfy momentum conservation it should be obvious.

