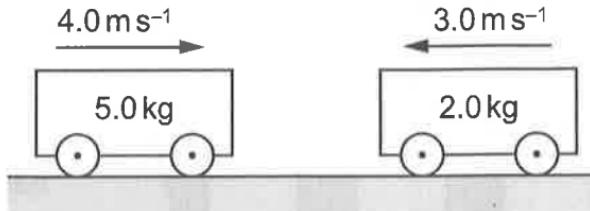


- 4 Two frictionless trolleys move along the same straight line towards one another. Their masses and velocities before collision are shown.



The trolleys collide and stick together.

What is the magnitude of the total momentum at the instant of collision and what is the final velocity of the trolleys?

	magnitude of total momentum at instant of collision / N s	final velocity of trolleys / m s^{-1}
A	0	2.0 to the right
B	0	3.7 to the right
C	14	2.0 to the right
D	14	3.7 to the right

- 5 A child of total mass m hangs a long-handled broom XY horizontally across the top of the back of a chair.