

- 6** Mary and Jane are standing at each end of an ice board 1.0 m in length. The ice board rests on frictionless ice. Mary throws a 5.0 kg ball horizontally to Jane who catches it.

Given that the mass of Mary, Jane and the ice board are 42 kg, 40 kg and 3.0 kg respectively, what is the distance travelled by the ice board before coming to rest again?

**A** 0.053 m

**D** 0.063 m

**B** 0.056 m

**C** 0.059 m