5 Two stationary ice-skaters Charlie and Sam, each of mass 60 kg, are directly facing one another on an ice-skating rink.

Charlie throws a 1.5 kg ball towards Sam with a horizontal speed of 2.5 m s^{-1}. Sam catches the ball and throws it back to Charlie with the same horizontal speed.

What is the speed of Charlie after catching the ball?

A 0 m s^{-1} **B** 0.063 m s^{-1} **C** 0.12 m s^{-1} **D** 0.13 m s^{-1}