5 A bowling ball undergoes head-on elastic collision with a stationary bowling pin. The bowling ball's mass is 5 times that of the pin. Given that the pin's speed immediately after the collision is 3.33 m s^{-1}, what is the speed of the bowling ball just before the collision?

A 1.33 m s^{-1} **B** 2.00 m s^{-1} **C** 3.33 m s^{-1} **D** 4.00 m s^{-1}