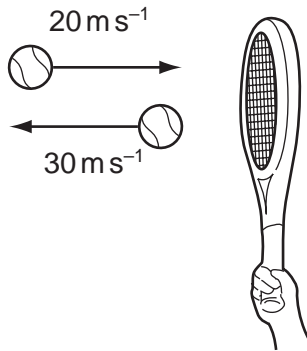**9** A tennis ball of mass 100 g is struck by a tennis racket. The velocity of the ball is changed as shown.

What is the magnitude of the change in momentum of the ball?

A $1\,\text{kg}\,\text{m}\,\text{s}^{-1}$ **B** $5\,\text{kg}\,\text{m}\,\text{s}^{-1}$ **C** $1000\,\text{kg}\,\text{m}\,\text{s}^{-1}$ **D** $5000\,\text{kg}\,\text{m}\,\text{s}^{-1}$