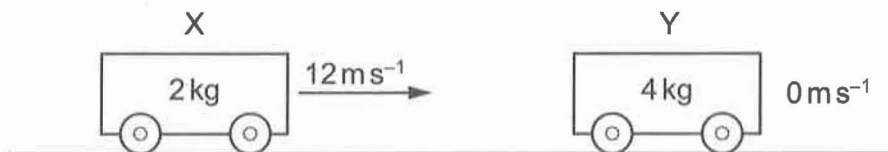


6 The diagram shows two trolleys, X and Y, of mass 2 kg and 4 kg respectively.

Trolley X is moving with a velocity of 12 m s^{-1} towards the stationary trolley Y.



What is the total momentum of the two trolleys after the collision?

- A** 2 kg m s^{-1} **B** 6 kg m s^{-1} **C** 24 kg m s^{-1} **D** 72 kg m s^{-1}