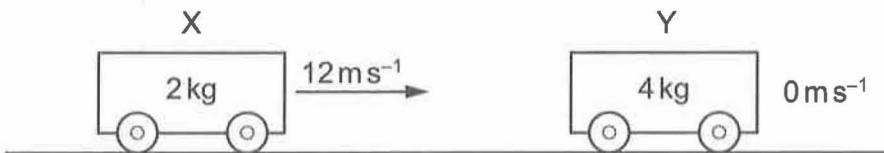


6 The diagram shows two trolleys, X and Y, of mass 2 kg and 4 kg respectively.

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 ms^{-1} B 6 kg ms^{-1} C 24 kg ms^{-1} D 72 kg ms^{-1}