

10 The table shows four different collisions between two blocks, each of mass 0.50 kg.

Which collision is perfectly elastic?

	before collision	after collision
A	$4.0 \text{ m s}^{-1} \rightarrow$ <div>0.50 kg</div> 0.0 m s^{-1} <div>0.50 kg</div>	$2.0 \text{ m s}^{-1} \rightarrow$ <div>0.50 kg 0.50 kg</div>
B	$2.0 \text{ m s}^{-1} \rightarrow$ <div>0.50 kg</div> $\leftarrow 2.0 \text{ m s}^{-1}$ <div>0.50 kg</div>	0.0 m s^{-1} <div>0.50 kg 0.50 kg</div>
C	$2.0 \text{ m s}^{-1} \rightarrow$ <div>0.50 kg</div> $\leftarrow 1.0 \text{ m s}^{-1}$ <div>0.50 kg</div>	$\leftarrow 2.0 \text{ m s}^{-1}$ <div>0.50 kg</div> $3.0 \text{ m s}^{-1} \rightarrow$ <div>0.50 kg</div>
D	$4.0 \text{ m s}^{-1} \rightarrow$ <div>0.50 kg</div> $1.0 \text{ m s}^{-1} \rightarrow$ <div>0.50 kg</div>	$1.0 \text{ m s}^{-1} \rightarrow$ <div>0.50 kg</div> $4.0 \text{ m s}^{-1} \rightarrow$ <div>0.50 kg</div>