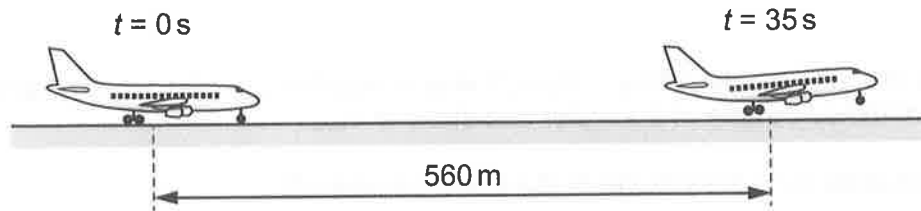5   An aeroplane is stationary at one end of a runway. It accelerates uniformly and takes off 35 seconds later, having travelled a distance of 560 m.

What are the acceleration and take-off speed of the aeroplane?

	acceleration /ms^{-2}	take-off speed /ms^{-1}
A	0.46	16
B	0.46	32
C	0.91	16
D	0.91	32

Which row is correct for an inelastic collision between two isolated objects?