

- 8 A boy throws a ball vertically upwards. It rises to a maximum height, where it is momentarily at rest, and then falls back to his hands.

Which row gives the acceleration of the ball at various stages in its motion? (Take vertically upwards as positive. Ignore air resistance.)

	rising	at maximum height	falling
A	-9.81 m s^{-2}	0	$+9.81 \text{ m s}^{-2}$
B	-9.81 m s^{-2}	-9.81 m s^{-2}	-9.81 m s^{-2}
C	$+9.81 \text{ m s}^{-2}$	$+9.81 \text{ m s}^{-2}$	$+9.81 \text{ m s}^{-2}$
D	$+9.81 \text{ m s}^{-2}$	0	-9.81 m s^{-2}

- 9 A body falling in a uniform gravitational field encounters air resistance. The air resistance