

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

Which of the following gives the acceleration of the ball at various stages in its motion? Take vertically upwards as positive. Neglect air resistance.

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