4 A man stands on the edge of a cliff. He throws a stone upwards with a velocity of 19.6 m s^{-1} at time $t = 0$. The stone reaches the top of its trajectory after 2.00 s and then falls towards the bottom of the cliff. Air resistance is negligible.

Which row shows the correct velocity v and acceleration a of the stone at different times?

	t/s	v/m s^{-1}	a/m s^{-2}
A	1.00	9.81	9.81
B	2.00	0	0
C	3.00	9.81	−9.81
D	5.00	−29.4	−9.81