6 A tennis ball is thrown horizontally in air from the top of a tall building.

If the effect of air resistance is **not** negligible, what happens to the horizontal and vertical components of the ball's velocity?

	horizontal component of velocity	vertical component of velocity
A	constant	constant
B	constant	increases at a constant rate
C	decreases to zero	increases at a constant rate
D	decreases to zero	increases to a maximum value

7 An object is thrown with velocity $5.2\,m\,s^{-1}$ vertically upwards on the Moon. The acceleration due to gravity on the Moon is $1.62\,m\,s^{-2}$.

What is the time taken for the object to return to its starting point?

A 2.5 s **B** 3.2 s **C** 4.5 s **D** 6.4 s

Space for working