Jan throws a tennis ball straight up into the air for a short distance and catches it when it comes down again.

Think about the ball when it is at A, on the way up to its highest point.

highest point



(a) How would you describe the motion of the ball at the point A?

Tick ONE box ( )



It is getting faster.



It is moving at a steady speed.



(b) Which of the following diagrams best shows the **vertical** forces on the ball at point A? (Ignore any horizontal forces.)

Tick ONE box (🗸 )



(c) What vertical forces are acting on the ball when it is at A, on the way up?

Tick ONE box (🗸 )

The only force on the ball is the upwards force from Jan's throw.
The only force on the ball is the force of gravity.
There are two forces on the ball: the force of gravity and the air resistance.
There are three forces on the ball: the force of gravity, air resistance and the force of the throw.
None of these. The forces acting are: