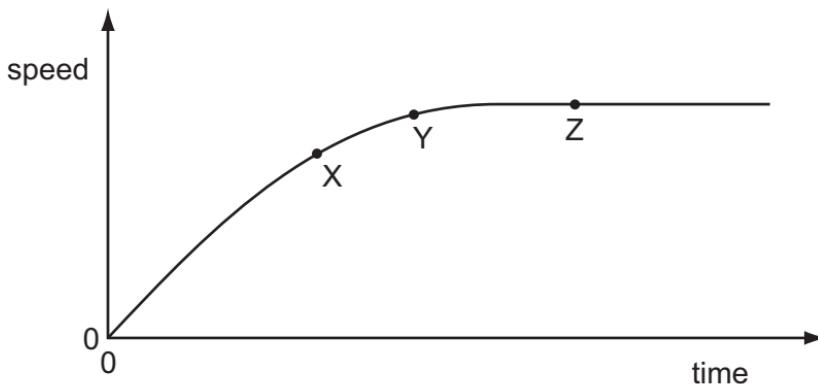


- 7 A raindrop falls vertically from rest in air. The variation with time of the speed of the raindrop is shown in the graph.



Which statement about the raindrop is correct?

- A At point X, the raindrop has an acceleration of 9.81 m s^{-2} .
- B At point Z, the force on the raindrop due to air resistance has reached its maximum value and so the acceleration of the raindrop has also reached its maximum value.
- C At point Z, the force due to air resistance is equal and opposite to the weight of the raindrop and so the speed of the raindrop is zero.
- D The resultant force on the raindrop at point Y is less than the resultant force on the raindrop at point X.