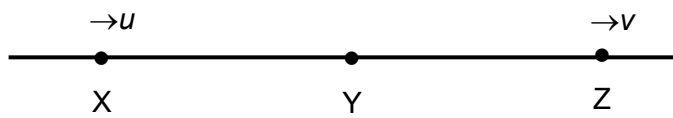


**3**

An object accelerates uniformly along a straight line from X to Z as shown in the figure.



It passes X and Z with speeds  $u$  and  $v$  respectively.

What is the speed when it passes Y, which is the mid-point of XZ?

**A**

$$\sqrt{uv}$$

**B**

$$\frac{1}{2}(u+v)$$

**C**

$$\sqrt{\frac{1}{2}(u^2+v^2)}$$

**D**

$$\sqrt{u^2+v^2}$$