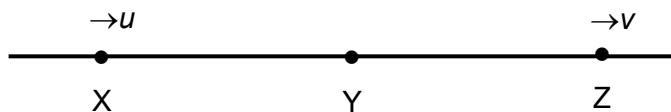


3

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

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