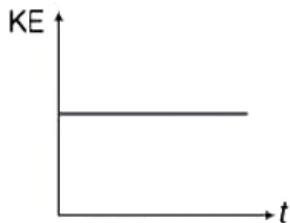
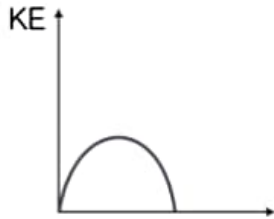


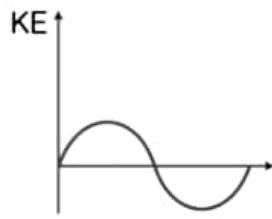
Q. Which of the diagrams shown in figure most closely shows the variation in kinetic energy of the earth as it moves once around the sun in its elliptical orbit?



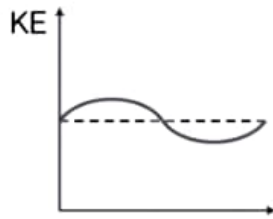
(a)



(b)



(c)



(d)

Ans. (d) When the earth is closest to the sun, speed of the earth is maximum, hence, KE is maximum. When the earth is farthest from the sun speed is minimum hence, KE is minimum but never zero and negative.

This variation is correctly represented by option(d).