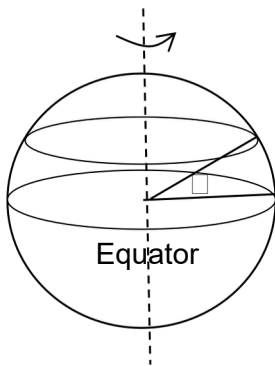


- 12** The Earth has a radius of  $6.38 \times 10^6$  m, and rotates on its axis once every 24 hours.



What is the linear speed of a person standing at a latitude of  $30^\circ$  on the surface of the Earth?

- A**  $230 \text{ m s}^{-1}$       **B**  $400 \text{ m s}^{-1}$       **C**  $540 \text{ m s}^{-1}$       **D**  $8.4 \times 10^5 \text{ m s}^{-1}$