

11. A particle experiences a constant acceleration which is north at  $100 \text{ m/s}^2$ . At  $t = 0$ , its velocity vector is  $60.0 \text{ m/s}$  to the East. At what time will the magnitude of the velocity be  $100 \text{ m/s}$ ?

A.  $0.8 \text{ s}$

B.  $1.0 \text{ s}$

C.  $2.0 \text{ s}$

D.  $4.0 \text{ s}$

E.  $8.0 \text{ s}$

F. Not close to any of the above

Ans. \_\_\_\_\_