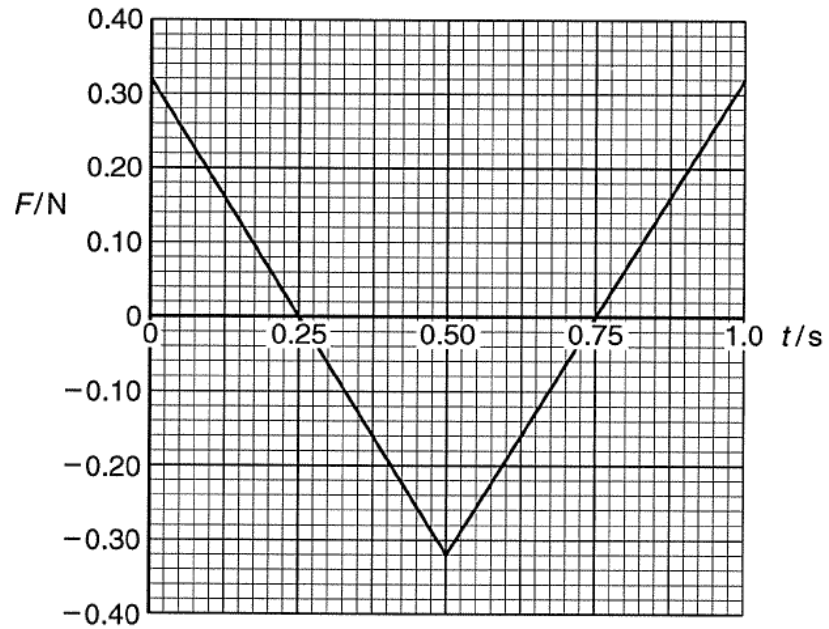


- 4 A resultant force  $F$  acts on a mass  $m$ . The variation with time  $t$  of  $F$  is as shown.



Mass  $m$  is 150 g. At time  $t = 0$ , the mass is at rest.

Which of the following statements is *incorrect*?

- A** The mass slowed down at a decreasing rate from  $t = 0.25$  s to  $t = 0.50$  s.
- B** The mass is momentarily at rest at  $t = 0.50$  s.
- C** The mass reversed direction at  $t = 0.50$  s and sped up at a decreasing acceleration from  $t = 0.50$  s to  $t = 0.75$  s.
- D** The magnitude of the change in velocity of the mass from  $t = 0.25$  s to  $t = 0.75$  s is  $0.53 \text{ m s}^{-1}$ .

