9. . A sprinter starts from rest and accelerates at a steady rate for the first 50 m of a 100 m race, and then continues at a constant velocity for the second 50 m of the race. If the sprinter runs the 100 m in a time of 10 s, what is his instantaneous velocity when he crosses the finish line? (A) 5 m/s (B) 10 m/s (C) 12 m/s (D) 15 m/s (E) 20 m/s