

5. A runner starts at the 15 yard line and runs with a constant velocity of 5 yards/second.

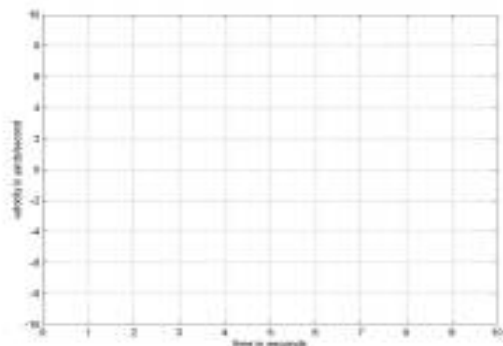
25



The runner's position function is

$$position(t) \equiv \underline{\quad} * t + \underline{\quad}$$

Plot the function on the grid to the left

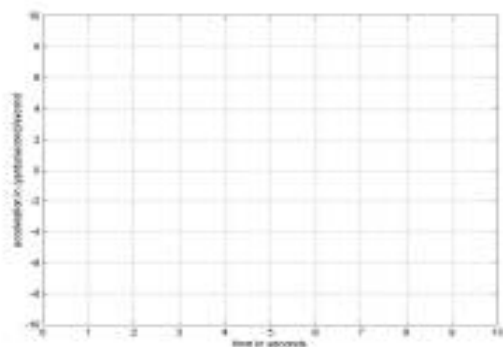


The runner's velocity function is

$$velocity(t) = position'(t) \equiv \underline{\quad}$$

(note: *velocity* and *position'* are names for the same function)

Plot the function on the grid to the left



The runner's acceleration function is

$$acceleration(t) = velocity'(t) \equiv \underline{\quad}$$

(note: *acceleration* and *velocity'* are names for the same function)

Plot the function on the grid to the left