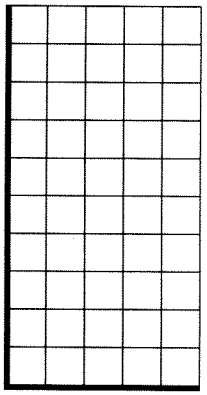
8. **Sketch the graphs of the two functions v(t) and s(t) of exercise 7 above.**



a. **Shade the region bounded the horizontal axis, the t-axis, the graph of v(t) and the vertical line t = 3.**

b. **Find the area of that shaded region.**

c. **Evaluate s(3).**

9. **Tom recently took a long ride on his bike. He was able to ride for 4 hours at a constant speed of 15 mph. Define Tom's velocity function v(t). Sketch a graph of that function.**

Specify a distance function s(t) for Tom's ride. Evaluate s(0), s(1), s(2), s(3), and s(4). How far did Tom ride between the end of hours 1 and 3?