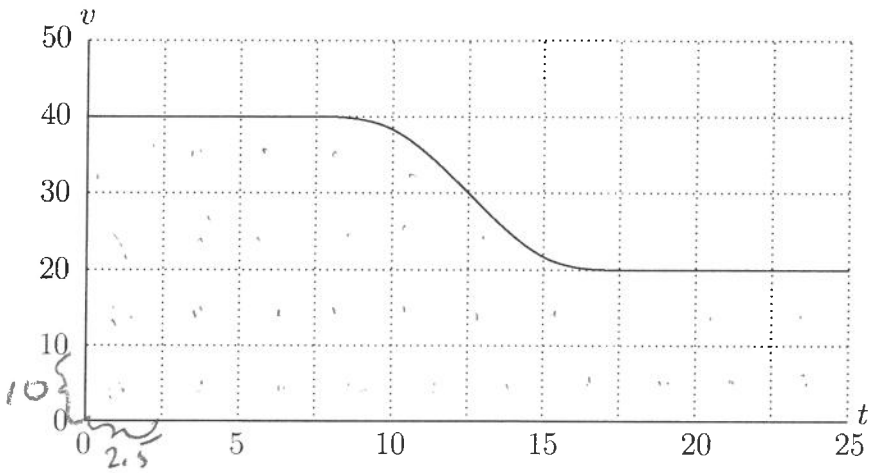
Mathematics 122

Quiz 29 Name: Key

You must show your work to get full credit.

The follow gives the speed, v, in feet per second of a skateboarder as a function of time, t, in seconds.



1. Each of the small boxes represents a distance covered. How much distance does each box represent?

A box represents (2.5 sec)(10 ft/sec) = 25 ft. A box represents 25 ft

2. How far does the skateboarder travel between $t = 0$ and $t = 5$ seconds?

Between $t=0$ and $t=5$ there are 8 boxes $8 \cdot (25) = 200$ Distance covered is 200 ft

3. How far does the skateboarder cover during the full 25 seconds?

This time I count 30 boxes so distance is $30 \times (25) = 750$ Distance covered is 750 ft

4. Write a sentence or two explaining how you got your answers.

Each box under the curve represents 25 ft traveled. So multiply the number of boxes under the curve by 25 ft.