Exercise 65

Nick starts jogging and runs faster and faster for 3 mintues, then he walks for 5 minutes. He stops at an intersection for 2 minutes, runs fairly quickly for 5 minutes, then walks for 4 minutes.

(a) Sketch a possible graph of the distance s Nick has covered after t minutes.

(b) Sketch a graph of ds/dt.

[TYPO: Replace "mintues" with "minutes."]

Solution

Below is a possible graph of Nick's total distance as a function of t.
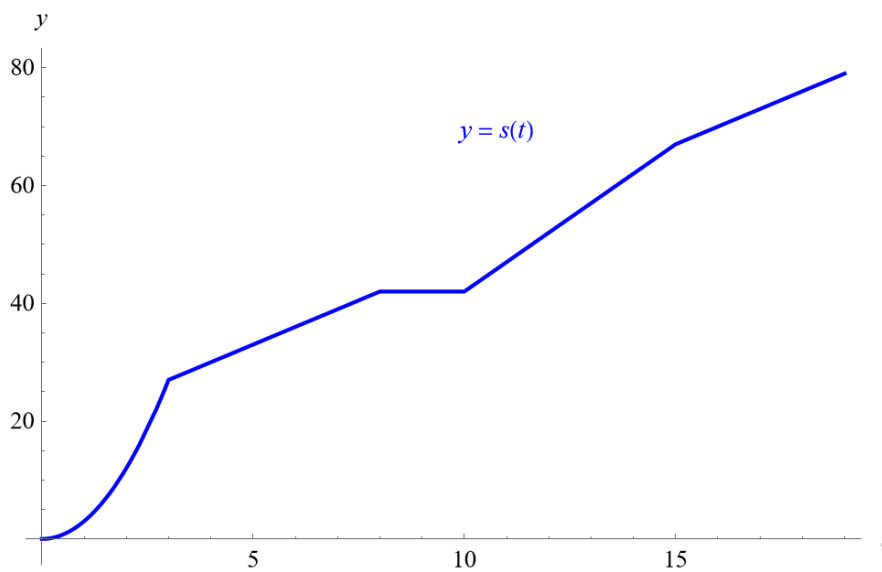
Below is a graph of Nick's speed as a function of t.