

Constructing Anti-Derivatives

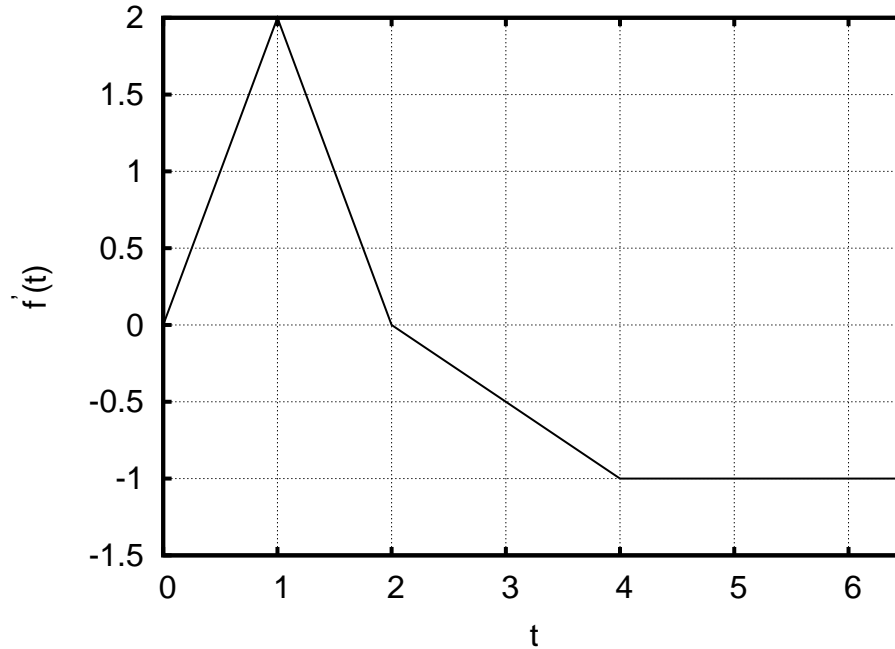


Figure 1: A plot of $f'(t)$, the rate, in thousands of gallons a day, at which water flows into a reservoir. A negative rate means that water is flowing out of the reservoir.

1. Determine $f(t)$, the water level in the reservoir as a function of time, given that at $t = 0$ the water level was 10. Enter your results in the table.
2. Determine $f(t)$, the water level in the reservoir as a function of time, given that at $t = 0$ the water level was 5. Enter your results in the table.
3. Plot the two $f(t)$'s that you found on the graph provided.

Time	Water Level	Water Level
0	10	5
1		
2		
3		
4		
5		
6		

