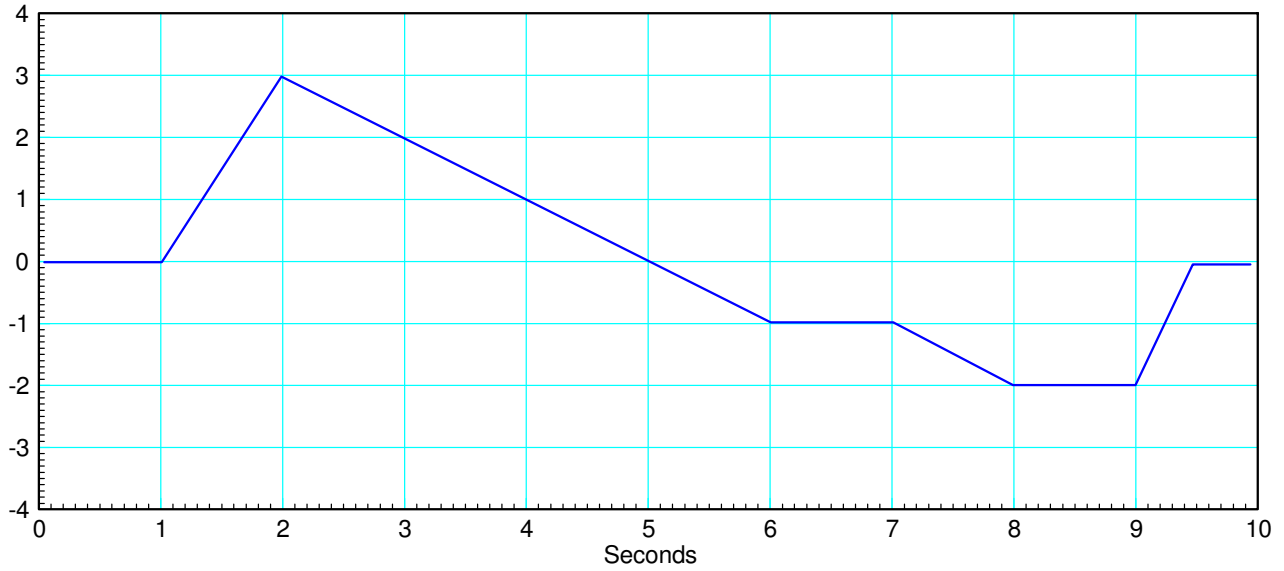


ECE 111: Handout #6

Week #6: Math 165 Calculus I (Differentiation)

Sketch the derivative of the following function



Solutions

1) Sketch the derivative of the following function

The derivative is the slope

$$\text{slope} = \left(\frac{\text{change in } y}{\text{change in } x} \right)$$

Think of the blue line as the money in your checking account.

- If your balance goes up, you're adding money to your account (slope is positive).
- The faster your balance goes up, the more you're adding.
- If your balance goes down, you're withdrawing money (spending money or adding negative money)
- The more you spend, the faster your checking account goes down

