MAT136: Calculus II
Summer 2025
Practice Questions for Test 1

Instructions

- **Write clearly** and concisely in a linear fashion.
- **Explain all your steps**. Unless stated otherwise, show all of your work.

1. Let f be the function

$$f(t) = \begin{cases} \frac{t^2}{9}, & \text{if } t \in [0,3) \\ \cos(\pi(t-3)) & \text{if } t \in [3,6) \\ t-7 & \text{if } t \in [6,8) \\ \frac{65}{t^2+1} & \text{if } t \in [8,\infty) \end{cases},$$

whose graph is sketched below:

