Exercise 1 Consider

$$f(x) = \begin{cases} 2 & \text{if } x < 1, \\ 0 & \text{if } x = 1, \\ 2 & \text{if } x > 1. \end{cases}$$

Is it possible to find another function F with F'(x) = f(x)? If so, find such a function. If not, explain why not.

Free Response: