1. [9 points]
   a. [3 points] Let \( T \) be the temperature in °F at a distance \( L \) feet away from a bonfire. It is known that for \( 1 \leq L \leq 3 \), the temperature \( T \) is inversely proportional to the cube root of the distance \( L \) to the bonfire. Find a formula for \( T \) in terms of \( L \) if the temperature at 2 feet away from the bonfire is 125°F.

   \[ T = \ldots \]

   b. [6 points] The graph of a polynomial \( f(x) \) of degree five is shown below.

   i) Find the zeros of \( f(x) \).

   ii) Find a formula for \( f(x) \).

   \[ f(x) = \ldots \]