1. (4 points) Let \( f(x) = x^{x^x} \). Find the derivative \( f'(x) \).

2. (4 points) Let \( g(x) = \sqrt{x + \sqrt{x + \sqrt{x + \ldots}}} \). Find the derivative \( g'(x) \).

3. (2 points) Would Maple be a useful tool in solving either of the above problems?