1. For \( f(x) = \frac{1}{1+x} \), \( 0 \leq x \leq 2 \). Find the value of the Riemann sum with four subintervals, taking the sample points to be the right endpoints.

2. Write the following limit as an integral (don’t attempt to evaluate)

\[
\lim_{n \to \infty} \left[ \sqrt{\frac{1}{n}} + \sqrt{\frac{2}{n}} + \sqrt{\frac{3}{n}} + \ldots \sqrt{\frac{n}{n}} \right]
\]