Show all work clearly and in order. Please box your answers. 10 minutes.

(PRACTICE PROBLEM) Find the most general antiderivative of the function $f(\theta) = 5 + \frac{1}{\theta^2}$.

3 1. Write $\int_0^3 \sin(\sqrt{x}) dx$ as a limit of Riemann sums taking the sample points to be the right endpoints on the subintervals. **DO NOT EVALUATE THE LIMIT**

2. Evaluate $\int_0^2 3x dx$ as a limit of Riemann sums taking the sample points to be the right endpoints on the subintervals.