

Quiz**Name**

1. Describe in detail (in mathematical) the steps of the process that provides the definition of $\int_a^b f(x) dx$. Do so completely in the abstract without graphs, and without referring to rectangles, areas, or the fundamental theorem of calculus.

2. State the Fundamental Theorem of Calculus.

3. Use the theorem to evaluate $\int_1^8 6x^2 dx$.