

QUESTION Evaluate $\int_0^1 \frac{1}{2x+1} dx$.

ANSWER

$$\int_0^1 \frac{1}{2x+1} dx = \left[\frac{1}{2} \ln(2x+1) \right]_0^1 = \frac{1}{2} \ln 3 - \frac{1}{2} \ln 1 = \frac{1}{2} \ln 3$$