

Want more revision exercises? Get [MathsFit](#) - New from projectmaths.

12	9	What is the value of $\int_1^4 \frac{1}{3x} dx$? (A) $\frac{1}{3} \ln 3$ (B) $\frac{1}{3} \ln 4$ (C) $\ln 9$ (D) $\ln 12$	1
B $\begin{aligned}\int_1^4 \frac{1}{3x} dx &= \frac{1}{3} \int_1^4 \frac{1}{x} dx \\&= \frac{1}{3} [\ln x]_1^4 \\&= \frac{1}{3} [\ln 4 - \ln 1] \\&= \frac{1}{3} \ln 4\end{aligned}$			State Mean: 0.71

* These solutions have been provided by [projectmaths](#) and are not supplied or endorsed by the Board of Studies