

# integrals for bee

June 8, 2025

## Integration Bee Problems

1.  $\int_0^1 x^x dx$

2.  $\int \frac{dx}{\sqrt{x + \sqrt{x}}}$

3.  $\int_0^1 \frac{\ln(x)}{1 + x^2} dx$

4.  $\int_0^\infty \frac{\sin x}{x} dx$

5.  $\int \frac{dx}{x^4 + 1}$

6.  $\int_0^1 \frac{\ln(1-x)}{x} dx$

7.  $\int_{-\infty}^\infty x^2 e^{-x^2} dx$