

Find or evaluate the integral

1. $\int \frac{x+1}{\sqrt{3x^2+6x}} dx$

2. $\int_2^3 \frac{\ln(x+1)^3}{x+1} dx$

3. $\int \frac{xe^{2x}}{(2x+1)^2} dx$

4. $\int \sin \sqrt{x} dx$