

1. Find the indefinite integral

$$\int \frac{5}{x^2 + 9} dx$$

2. Find the indefinite integral

$$\int x \ln x dx$$

3. Find the indefinite integral

$$\int x^2 \cos(x) dx$$

4. Find the indefinite integral

$$\int (3t + 5) \cos\left(\frac{t}{4}\right) dt$$