

Integrate:

1.  $\int x e^x, dx$

2.  $\int x \sin(x), dx$

3.  $\int \ln(x), dx$

4.  $\int e^x \cos(2x), dx$

5.  $\int x^3 e^x, dx$

6.  $\int x \tan(x), dx$

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