

8.2

CALCULUS BC  
WORKSHEET ON INTEGRATION BY PARTS

Work the following on notebook paper.

Evaluate.

1.  $\int xe^{2x} dx$

2.  $\int x \sec^2 x dx$

3.  $\int x^2 \sin x dx$

4.  $\int x^3 \ln x dx$

5.  $\int \frac{x}{e^{3x}} dx$

6.  $\int \arctan(2x) dx$

7.  $\int e^{4x} \sin x dx$

8.  $\int_0^1 xe^{-5x} dx$

9.  $\int_{\sqrt{e}}^e x \ln x dx$

10.  $\int \arcsin(3x) dx$

11.  $\int x^3 e^{2x} dx$

12.  $\int \ln(x^2 + 1) dx$

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