

Integration by Parts- HW Problems

Evaluate the following integrals.

1. $\int x \cos(x) dx$

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

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

4. $\int e^x \sin(x) dx$

5. $\int x \ln(x) dx$

6. $\int x^2 e^x dx$

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

8. $\int_0^1 x \cosh(x) dx$

9. $\int \cos(\sqrt{x}) dx$

10. $\int [\ln(x)]^3 dx$