

1. Use Integration by Parts to integrate each.

a. $\int \frac{2x}{e^x} dx$

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

c. $\int x\sqrt{x-1} dx$

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

2. Use Trig. Identities to integrate each:

a. $\int \sin^3 2x \cos^4 2x dx$

b. $\int \cos^2(5x) dx$