MATH 1325
Chapter 13.3: Integration By Parts

$$\int u\,dv = uv - \int v\,du$$

u: v:

du: dv:

FIND $\int xe^x dx$.

TRY 1:

$\int xe^x dx$

TRY 2:

$\int xe^x dx$

FIND $\int x^3 \ln x \, dx$.

FIND $\int \ln x \, dx$.

FIND $\int \frac{5x-7}{e^x}\,dx$.

FIND $\int 8x^2 e^{4x-9}\,dx$.

THE VELOCITY OF A CAR IN ft/sec AFTER t SECONDS IS:

$$v(t) = 25 \ln(t+1) \quad 0 \le t \le 60.$$

FIND $s(t)$.

FIND $a(t)$.