

## 10.4 Integration by Parts

Integration by Parts –



Steps:

Order of  $u$  and  $v'$  =

$u$  ←————→  $v'$

$$\int x \sin x \, dx$$

$$\int x^2 \ln x \, dx$$

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

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

**Definite Integration by Parts –**



Evaluate  $\int_1^e \ln x dx$