$$\int e^x dx = e^x + c$$

$$x^{n-1} \int e^{x^n} dx = e^{x^n} + c$$

Tips:

1. The integral of e^x is $e^x + c$, it doesn't change
2. Change roots/fractions to index power before integrating
   $3/e^{2x} = 3e^{-2x}$
3. Where there are brackets, you can expand
   $e^{x^2(x-1)} = e^{x^3-x^2}$
4. Recall properties of exponential functions
   $e^x e^y = e^{x+y}$
   $(e^x)^p = e^{px}$
   $e^x/e^y = e^{x-y}$
   $\sqrt[p]{e^x} = e^{x/p}$

13.3 WORKED EXAMPLE

$$\int 5x^2 e^{x^3} dx$$

13.4 WORKED EXAMPLE

$$\int e^{2x} \sin(e^{2x}) dx$$