

$$\int a^x dx = \frac{a^x}{\ln a} + c$$

Tips:

1. Used when a constant is to the power of  $x$
2. Uses identity  $a^x = e^{\log a^x} = e^{a \log x}$

### 17.3 WORKED EXAMPLE

$$\int 4^{x^4} x^3 dx$$

### 17.4 WORKED EXAMPLE

$$\int_0^1 2^{x^3} x^2 dx$$