

# Integración por partes

Byte Planet

$$\int x e^x dx$$

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

$$u = x$$
$$dv = e^x dx$$

$$du = dx$$

$$\int dv = \int e^x dx$$

$$v = e^x$$

①

$$\int x e^x dx = x e^x - \int e^x dx$$

②

$$\int x e^x dx = x e^x - e^x + C$$

$$* \int e^x dx = e^x$$