2 mal part int :

$$\int e^x \sin x = \int \underline{e}^x \sin x = e^x \sin x - \int e^x \underline{\sin} x = e^x \sin x - \int e^x \cos x = e^x \sin x - \int \underline{e}^x \cos x$$

$$= e^x \sin x - \left(e^x \cos x - \int e^x \underline{\cos} x \right) = e^x \sin x - e^x \cos x - \int e^x \sin x$$

$$\Rightarrow \int e^x \sin x = e^x \frac{\sin x - \cos x}{2} : \quad \int_0^\pi e^x \sin x = e^x \frac{\sin x - \cos x}{2} \Big|_0^\pi$$

$$\int_a^b e^x \cos x$$