

EXERCÍCIO 4



$$\int \underline{e^x} \cdot \cos \underline{2e^x} \underline{dx} = \int \cos u \frac{du}{2} = \frac{1}{2} \int \cos u \, du =$$

$$u = 2e^x$$

$$du = \underline{2e^x} \underline{dx}$$

$$\frac{du}{2} = \underline{e^x} \underline{dx}$$

$$= \frac{1}{2} \sin u = \frac{1}{2} \sin 2e^x + C //$$

$$= \frac{\sin 2e^x}{2} + C //$$

Obs.: $u = \cos(2e^x)$

$$\frac{du}{2} = \underline{-\sin(2e^x)} \cdot \underline{2e^x} \underline{dx}$$

$$\int = \underline{e^x} \underline{\sin(2e^x)} \cdot \underline{\cos(2e^x)} \underline{dx} = \int u \frac{du}{2} = \dots$$