

EJERCICIO MIBE2471:

Halla la derivada de $f(x)$:

$$f(x) = \operatorname{sen}^4(3x) = [\operatorname{sen}(3x)]^4$$

$$\begin{aligned} u^m &\rightarrow m \cdot u^{m-1} \cdot u' \\ \operatorname{Sen} u &\rightarrow u' \cdot \cos u \end{aligned}$$

$$\begin{aligned} f'(x) &= 4 \cdot \operatorname{sen}^3(3x) \cdot [\operatorname{sen}(3x)]' = \\ &= 4 \cdot \operatorname{sen}^3(3x) \cdot 3 \cdot \cos(3x) = \\ &= 12 \cdot \operatorname{sen}^3(3x) \cdot \cos(3x) \end{aligned}$$