

EJERCICIO MIBE2220:

Ostener la derivadas:

$$a.- h(x) = \frac{2}{x} + e^{-2x} + \cos x$$

$$b.- p(x) = \ln \frac{x^2}{\operatorname{sen} x}$$

$$a.- h(x) = \frac{2}{x} + e^{-2x} + \cos x$$

$$h'(x) = \frac{0 \cdot x - 2 \cdot 1}{x^2} - 2 \cdot e^{-2x} - \operatorname{sen} x =$$

$$= \boxed{\frac{-2}{x^2} - \frac{2}{e^{2x}} - \operatorname{sen} x}$$

$$b.- p(x) = \ln \frac{x^2}{\operatorname{sen} x} = \ln x^2 - \ln \operatorname{sen} x$$

$$p'(x) = \frac{\cancel{2x}}{\cancel{x^2}} - \frac{\cos x}{\operatorname{sen} x}$$

$$\boxed{p'(x) = \frac{2}{x} - \operatorname{cotg} x}$$