EXERCÍCIO 7

Sendo $f(x) = e^{\operatorname{sen}(x^2-x)}$, determine a função $\frac{df}{dx}$.

$$f'(x) = e^{\operatorname{sen}(x^2-x)} \cdot \left(\operatorname{sen}(x^2-x)\right)' = f'(x)$$

$$= e^{\operatorname{sen}(x^2-x)} \cdot \cos(x^2-x) \cdot (x^2-x)' =$$

$$= e^{\operatorname{sen}(x^2-x)} \cdot \cos(x^2-x) \cdot (2x-1)$$

Regra da Cadeia:

$(e^{\square})' = e^{\square} \cdot \square'$

$(e^x)' = e^x$

$(\operatorname{sen}\square)' = \cos\square \cdot \square'$

$(\operatorname{sen} x)' = \cos x$