DERIVATIVES (EXPONENTIAL FUNCTIONS DIFFERENTIATION)

$y = 7^{(x^2 - x)}$ ln: NATURAL log

$\frac{Dy}{Dx}$

$v(x) = 7^2$ $u(x) = x^2 - x$

$y = 7x^2 - x$ = $u'(x) = 2x - 1$

$Dy = dv \cdot du$

$Dx = du\ dx$

~~$7x^2 + y = 7x^2 - x + 7x^2$~~

$\frac{dy}{dx} = (\ln 7) 7^{(x^2 - x)} \cdot 2x - 1$