CALCULUS Logarithmic differentiation NEVV

0400-1. Using logarithmic differentiation,

differentiate
$$z = \frac{(5e^{-x})(-5x^2 + 7)^3(x^4 + 2x)^{75}}{(x+5)^6(x^{100} + 1)^4}$$

$$0400-2$$
. Differentiate $q=t^{5t}$.

0400-3. Differentiate
$$Z(r) = (2 + \cos r)^{e^r}$$
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