Formative Assessment #33 – Logarithmic Differentiation

C8.3: I can determine the derivative of a function using logarithmic differentiation.

1. Use logarithmic differentiation to find y' and express it in terms of x.

a) $y = (9x)^{e^x}$

b) $y = x^{\frac{2}{5}}(x^2 + 7x)(3^{\pi x})$

c) $f(x) = \dfrac{(x-9)^5 e^{17x}}{\sqrt[3]{2x^2+4}}$