

## Session 8: HW Differentiation Practice - Logarithmic Functions

November 8, 2024

Differentiate the following functions:

1.  $y = \frac{2^x}{x+1}$

2.  $y = 7^{\sqrt{x^2+1}}$

3.  $y = \log_{10}(2^x)$

4.  $y = 3^{x^3+2x} \cdot 5^{x^2-1}$

5.  $y = (\sin(x))^{2^x}$  (Hint: Use logarithmic differentiation)