

F-BF Exponentials and Logarithms II

Task

Let f be the function defined by $f(x) = 10^x$ and g be the function defined by $g(x) = \log_{10}(x)$.

- Sketch the graph of $y = f(g(x))$. Explain your reasoning.
- Sketch the graph of $y = g(f(x))$. Explain your reasoning.
- Let f and g be any two inverse functions. For which values of x does $f(g(x)) = x$? For which values of x does $g(f(x)) = x$?



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