

Quiz 4 – MATH 3503 Fall 2022

1. If $f(x, y) = x^2y^3 + y^4$, $x = x(t) = \sin(t)$, and $y = y(t) = e^t$, then use the chain rule to compute $\frac{\partial f}{\partial t}$.

2. If $f(x, y) = e^{xy} + \sin(xy)$, $x = x(t, s) = st^2$, and $y = y(t) = e^{st}$, then use the chain rule to compute $\frac{\partial f}{\partial t}$ and $\frac{\partial f}{\partial s}$.