

Assessment Problem for Math 2011 Sp 2026

Compute the derivatives of the following functions. Simplify your answers.

(a) (5 points) $f(x) = (x^3 + 1) \cos x$

(b) (5 points) $f(x) = \frac{e^x}{1 - x^2}$

(c) (5 points) $f(x) = (x + \tan^{-1} x)^4$

(d) (5 points) $f(x) = \ln \left(5x - \frac{1}{x} \right)$