

MEMORIAL UNIVERSITY OF NEWFOUNDLAND
DEPARTMENT OF MATHEMATICS AND STATISTICS

SECTION 3.2

Math 1000 Worksheet

FALL 2023

For practice only. Not to be submitted.

1. Differentiate each of the following.

(a) $y = \sqrt{4e^x + 2}$

(b) $y = \sin(x^2 - 7x)$

(c) $f(x) = e^{5^x}$

(d) $y = \cos(\cos(x))$

(e) $f(x) = (5 - 2x)^{-4}e^{\sec(x)}$

(f) $f(t) = \tan(x^2e^x)$

(g) $y = \frac{x^2}{(x^3 - x)^6}$

(h) $h(x) = \sin(\cos(\tan(x)))$