

MEMORIAL UNIVERSITY OF NEWFOUNDLAND
DEPARTMENT OF MATHEMATICS AND STATISTICS

SECTION 4.2

Math 1000 Worksheet

FALL 2024

For practice only. Not to be submitted.

1. In each problem, find the intervals on which $f(x)$ is increasing, decreasing, concave upward and concave downward. Identify any relative extrema and points of inflection.

(a) $f(x) = 3x^4 - 8x^3 + 6x^2$

(b) $f(x) = \ln(1 + x^2)$