MEMORIAL UNIVERSITY OF NEWFOUNDLAND

DEPARTMENT OF MATHEMATICS AND STATISTICS

SECTION 2.5 **Math 1090 Worksheet** FALL 2026

For practice only. Not to be submitted.

1. Sketch the graph of each of the following *without* constructing a table of values. Label all important points. Identify the domain and the range of the function in each case.

   (a) $f(x) = \frac{1}{2}x^2 + 1$

   (b) $f(x) = -x^2 + 4x - 3$

   (c) $y = 4x^2 - 4x - 3$

   (d) $y = \left|1 - \dfrac{x}{3}\right|$

   (e) $f(x) = -2|x + 2| - 1$

   (f) $y = \sqrt{x + 4} + 1$

   (g) $y = 3 - 4\sqrt{x}$

   (h) $f(x) = \sqrt{1 - x} - 2$