

MEMORIAL UNIVERSITY OF NEWFOUNDLAND

DEPARTMENT OF MATHEMATICS AND STATISTICS

SECTION 2.5

Math 1090 Worksheet

FALL 2009

For practise only. Not to be submitted.

- Compared to the graph of the absolute value function $f(x) = |x|$, what transformations have the graphs of the following functions undergone?
 - $f(x) = 2|x + 5|$
 - $f(x) = \frac{7}{2} - |x - 3|$
- Compared to the graph of the quadratic function $y = x^2$, what transformations have the graphs of the following functions undergone?
 - $y = -3x^2 - 2$
 - $y = (2x + 2)^2$
- Compared to the graph of the square root function $f(x) = \sqrt{x}$, what transformations have the graphs of the following functions undergone?
 - $f(x) = \sqrt{x - 4} + 1$
 - $f(x) = -\frac{2}{5}\sqrt{4 - x}$
- Consider the parabolas you drew for Question 6 on Worksheet 2.3. Identify the axis of symmetry in each case, and include it on your sketch of the graph.
 - $f(x) = \frac{1}{2}x^2 + 1$
 - $f(x) = -x^2 + 4x - 3$
 - $y = 4x^2 - 4x - 3$