

MEMORIAL UNIVERSITY OF NEWFOUNDLAND

DEPARTMENT OF MATHEMATICS AND STATISTICS

SECTION 4.6

Math 1001 Worksheet

WINTER 2025

For practice only. Not to be submitted.

1. Use the disc-washer method to find the volume of the solid generated by rotating the indicated region about the x -axis.
 - (a) $y = \sqrt{x-2}$, $y = 0$, $x = 6$
 - (b) $y = x^2$, $y = 2x$
 - (c) $y = \frac{12}{x}$, $y = 3x$, $y = 2$
2. Use the disc-washer method to derive the formula for the volume of a cone of radius a and height b .