## Calculus Class Worksheet \#5 Unit 3

For each of the following problems you must
a. sketch a graph of the region described, and
b. use calculus to find the volume of the solid formed when this region is revolved about the $\mathbf{x}$-axis. (You should round to 3 significant figures where appropriate.)

1. the region bounded by the $x$-axis, the lines $x=1$ and $x=5$, and the line $y=2 x+3$

2. the region bounded by the $x$-axis and the curve $y=2+x-x^{2}$

3. the region bounded by the $x$-axis, the lines $x=1$ and $x=4$, and the curve $y=\sqrt{x}$

