1. Sketch each solid described, and set up the integral that gives its volume
(a) The base of the solid is bounded by the graphs $y=x^{2}+1$ and the $x$-axis for $-2 \leq x \leq 2$ and cross-sections perpendicular to the $x$-axis are squares
(b) The solid formed when the region bounded by $y=x^{2}$ and $y=2 x$ is rotated about the $y$-axis
(c) The solid formed when the region from (b) is rotated about the line $x=3$
2. Find the volume of each solid by computing the integrals you set up in \#1
