

Work on these with your partner(s) at the board

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 $y = 2x$ 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