Due **Tuesday** 5 Dec, in reci. Show your work.

. 10

1. Consider the region bounded by $y = x^2$, $y = -x^3$ and $x = 1$, revolved around the vertical axis $x = -2$. (Ignore the region bounded only by $y = x^2$ and $y = -x^3$ between $x = 0$ and $x = -1$.)

   (a) Sketch the region, including intersection points and the axis of revolution.

   (b) Set up (but do not evaluate) the integral(s) for the volume of revolution using the washer method.

   (c) Set up (but do not evaluate) the integral(s) for the volume of revolution using the shell method.