Present neatly on separate paper. Justify for full credit. No Calculators. Name ______Score _____ 6 minutes **Weight: x2**

Consider the region enclosed by the curves with the given equations:

$$y = \sec^2 x$$
, $y = 2$, $|x| < \frac{\pi}{3}$.

- a) Set up and evaluate the area of the described region. Sketch the region neatly.
- b) Set up, but do not evaluate, the volume of the solid that results when the region enclosed by the given curves is revolved about the x-axis.