Name: ———————————————————————   **Section**: ——————————————

Clear your desk of everything except pens, pencils and erasers. **Show all your work.**
If you have a question raise your hand and I will come to you.

1. Find the volume of the solid generated by rotating about the x-axis the region bounded by the curves $y = \sqrt{25 - x^2}$ and $y = 0$.

   (a) (4 points) Draw a picture of the solid.

   (b) (3 points) Write the formula for the area of a cross-section.

   (c) (3 points) Set up, **but do not evaluate**, the integral representing the volume of the solid.