M1B/Schoenbrun   Section 6.4 Volumes by Shells

1) Use the shell method to find the volume generated by revolving $y = x^2$ around the x-axis on the interval $[0,1]$.   Then revolve it around the y-axis and find the volume.

2) Use the shell method to find the volume generated by revolving the region between $y = \sqrt{x}$ and $y = x^2$ on the interval $[0,1]$.

3) Use the shell method to find the "Frustrum" of a cone in terms of it's height h, the lower base radius R and the upper base radius r.