1) Revolve the function $y = x^2$ around the x axis and find the volume on the interval [0,1]

2) Revolve the function $y = x^2$ around the y axis and find the volume on the interval [0,1]

3) Revolve the function $y = e^x$ around the x axis and find the volume on the interval [0,1]

4) Given a volume with the base a circle of radius 1, with the cross section at each chord perpendicular to a diameter an equilateral triangle, find the volume.

