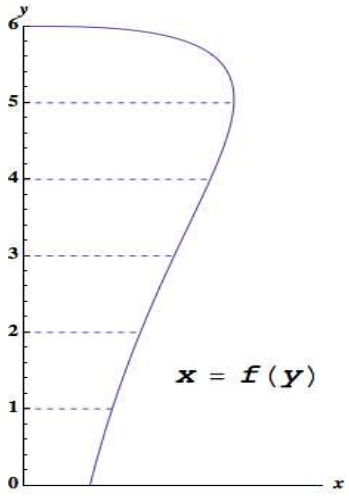
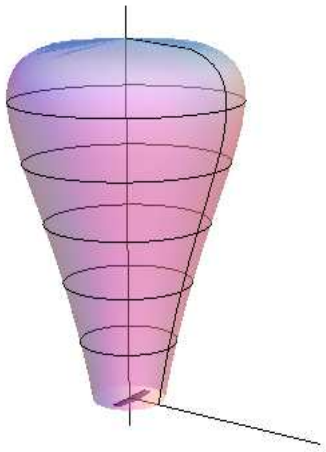
1. [7 points] A lightbulb is obtained by revolving the curve $x = f(y)$ around the y-axis:



(a) Graph of $x = f(y)$



(b) 3D view of the bulb

The following table gives values of $x = f(y)$:

y	0	1	2	3	4	5	6
$x = f(y)$	0.8	1.1	1.5	1.9	2.4	2.8	0

a. [4 points] Write an integral involving $f(y)$ that computes the volume of the lightbulb.

b. [3 points] Estimate the volume using the midpoint rule. Use the largest number of subintervals possible, given the information in the table above. Write out each of the terms in the sum.