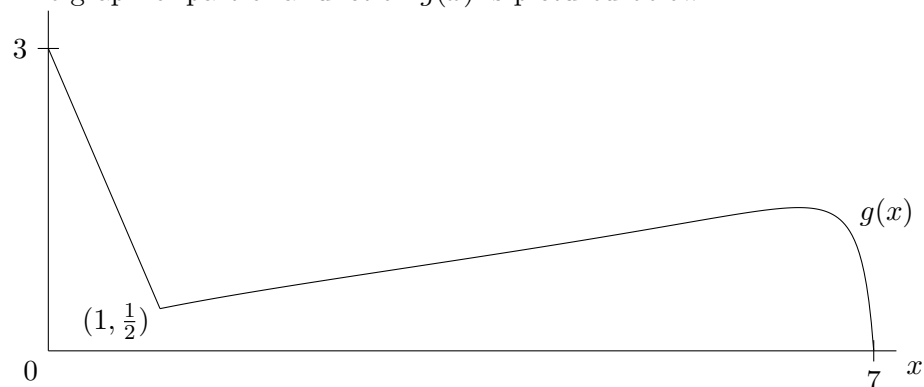


10. [8 points] The graph of part of a function $g(x)$ is pictured below.



- a. [4 points] A thumbtack has the shape of the solid obtained by rotating the region bounded by $y = g(x)$, the x -axis and y -axis, about the y -axis. Find an expression involving integrals that gives the volume of the thumbtack. Do not evaluate any integrals.
- b. [4 points] A door knob has the shape of the solid obtained by rotating the region bounded by $y = g(x)$, the x -axis and y -axis, about the x -axis. Find an expression involving integrals that gives the volume of the door knob. Do not evaluate any integrals.