

- 1) Determine the volume of the solid obtained by rotating the region bounded by  $y = \frac{1}{2}x$ ,  $x = 0$  and  $y = 1$  about the  $y$ -axis.

2) Set up the integral, but do not solve: Determine the volume of the solid bounded by rotating the region bounded by  $y = x^2$  and  $y = x^3$  about the  $y$ -axis.