

## Volumes

1. Find the volume of a pyramid that is 3 ft high with a square base that is 3 ft on each side if the cross sections of the pyramid perpendicular to the altitude  $x$  ft down from the vertex is a square measuring  $x$  ft on each side.
2. Find the volume of the solid generated by revolving the region bounded by  $y = x$  and  $y = x^2$  about the  $x$ -axis using:
  - a. washers
  - b. shells
3. Find the volume of the solid generated by revolving the region bounded by  $y = x$  and  $y = x^2$  about the line  $x=1$  using:
  - a. washers
  - b. shells