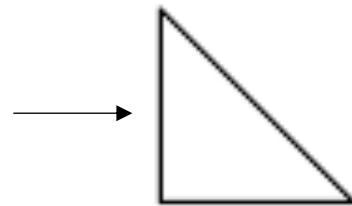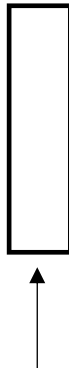# 11.2 Volumes of Rotational Solids
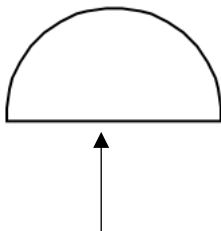
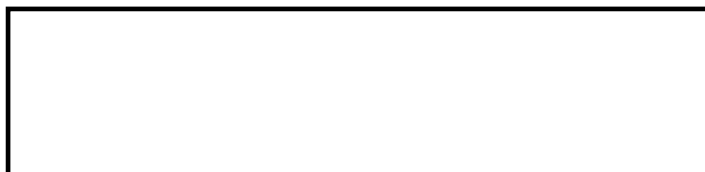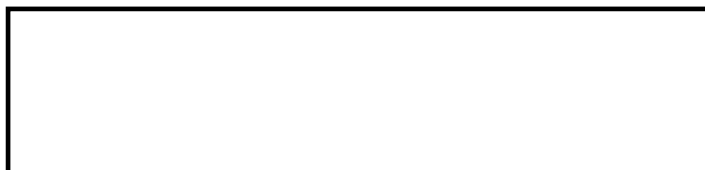**Plane –**

Plane region –

(1) The Disc Method –

Radius of Rotation –

Revolution about the *x*-axis:

Revolution about the *y*-axis:

Find the volume of the solid generated when the region enclosed by $y = -x^2 + 4$ and $y = 0$ is revolved about the x-axis.

Find the volume of the rotational solid generated by rotating the area in the first quadrant bounded by $y = x^2$, the y-axis, and the line $y = 9$ around the y-axis.