**General Slicing Method:** \( V = \int_{a}^{b} A(x) \, dx \)

**Disks about the x-axis:** \( V = \pi \int_{a}^{b} f(x)^2 \, dx \)

**Disks about the y-axis:** \( V = \pi \int_{c}^{d} f(y)^2 \, dx \)

For disks: Must be entirely adjacent to axis of rotation

**Washers about the x-axis:** \( V = \pi \int_{a}^{b} (f(x)^2 - g(x)^2) \, dx \)

\( f(x) \) is the outer radius while \( g(x) \) is the inner radius

**Washers about the y-axis:** \( V = \pi \int_{c}^{d} (f(y)^2 - g(y)^2) \, dy \)

**Shell Method about the y-axis:** \( V = 2\pi \int_{a}^{b} x(f(x) - g(x)) \, dx \)

\[ 2\pi \int \text{(shell radius)} \cdot \text{(shell height)} \]

**Shell Method about the x-axis:** \( V = 2\pi \int_{c}^{d} y(f(y) - g(y)) \, dy \)