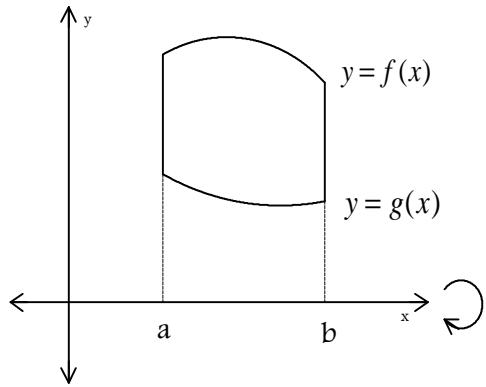
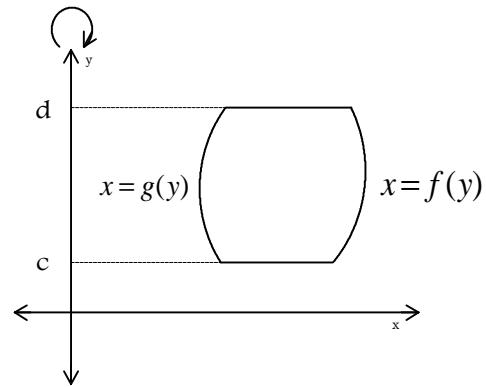


Volumes of Solids of Revolution

Washer Method

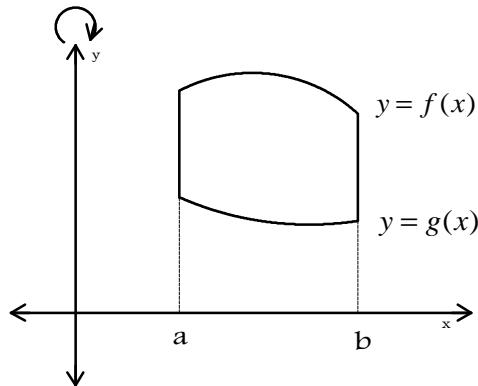


$$V = \pi \int_a^b ([f(x)]^2 - [g(x)]^2) dx$$

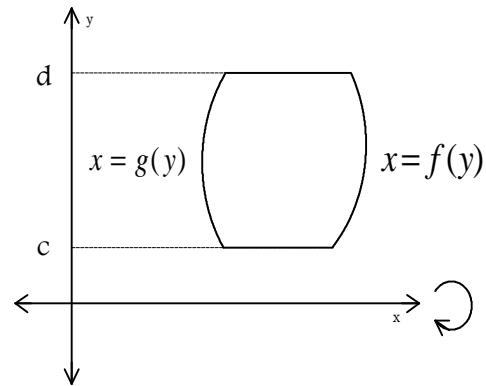


$$V = \pi \int_c^d ([f(y)]^2 - [g(y)]^2) dy$$

Cylindrical Shells Method



$$V = 2\pi \int_a^b x (f(x) - g(x)) dx$$



$$V = 2\pi \int_c^d y (f(y) - g(y)) dy$$