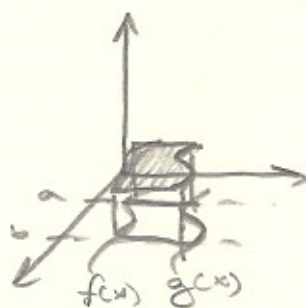


§16.3 DOUBLE INTEGRAL OVER GENERAL DOMAIN

TYPE I

$$D = \begin{cases} a \leq x \leq b \\ f(x) \leq y \leq g(x) \end{cases}$$



$$\int_a^b \left(\int_{f(x)}^{g(x)} f(x, y) dy \right) dx$$

TYPE II

$$D = \begin{cases} f(y) \leq x \leq g(y) \\ a \leq y \leq b \end{cases}$$

$$\int_a^b \left(\int_{f(y)}^{g(y)} f(x, y) dx \right) dy$$