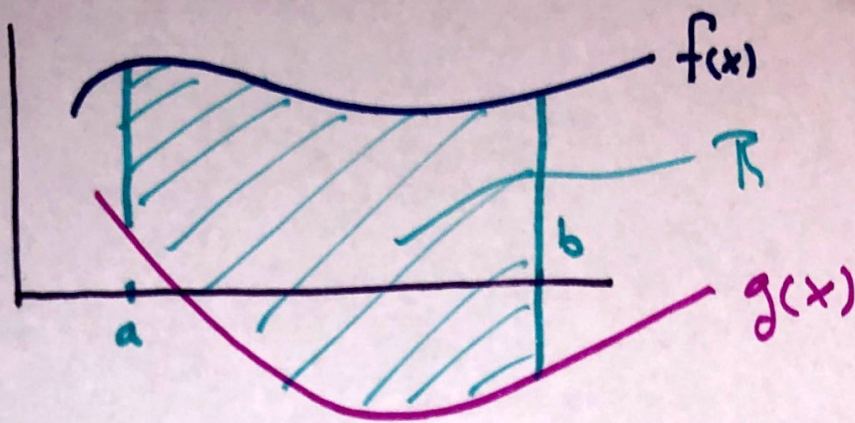
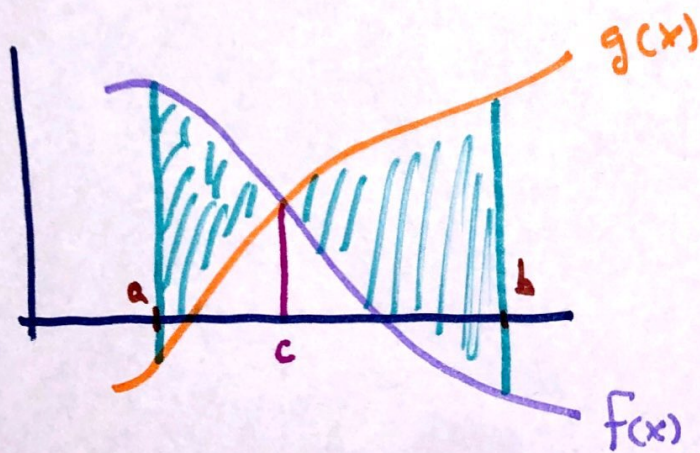


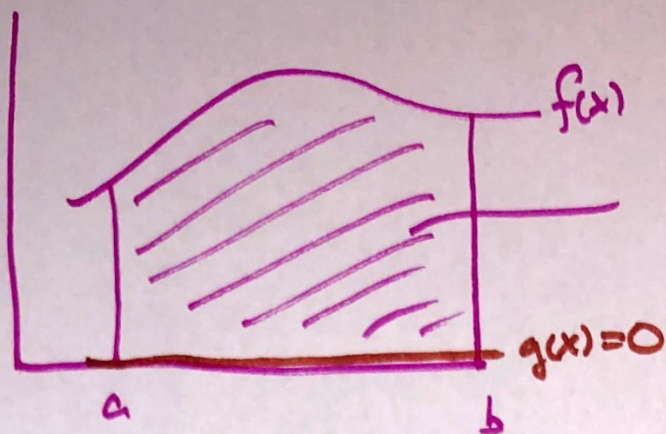
§ 6.1 - Area Between Curves



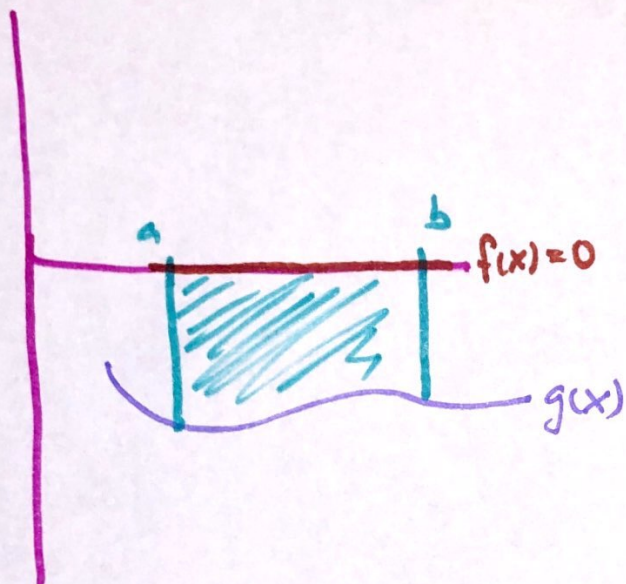
$$\text{Area}(R) = \int_a^b f(x) - g(x) dx$$



$$\text{Area} = \int_a^b |f(x) - g(x)| dx = \int_a^c f(x) - g(x) dx + \int_c^b g(x) - f(x) dx$$



$$\begin{aligned} \text{Area} &= \int_a^b f(x) - 0 \, dx \\ &= \int_a^b f(x) \, dx \end{aligned}$$



$$\begin{aligned} \text{Area} &= \int_a^b 0 - g(x) \, dx \\ &= - \int_a^b g(x) \, dx \end{aligned}$$