

Due Date: Sep 20, 2018 (12:00 noon)

Thomas' Calculus (12th Ed.)

§ 15.2: 13, 21, 32, 41, 52, 59, 77

§ 15.3: 8, 17, 21.

Note: In Thomas' Calculus, (Q13 in § 15.2)

$$\int_a^b \int_{g_1(x)}^{g_2(x)} f(x,y) dy dx = \int_a^b \left[\int_{g_1(x)}^{g_2(x)} f(x,y) dy \right] dx$$

is said to be using vertical cross-sections

Similar,

$$\int_c^d \int_{h_1(y)}^{h_2(y)} f(x,y) dx dy = \int_c^d \left[\int_{h_1(y)}^{h_2(y)} f(x,y) dx \right] dy$$

is said to be using horizontal cross-sections