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$$V_x = \pi \int_{\alpha}^{\beta} g(t)^2 f'(t)\, dt \, , \quad f(\alpha) < f(\beta)$$

$$= \pi \int_{\beta}^{\alpha} g(t)^2 f'(t)\, dt \, , \quad f(\beta) < f(\alpha)$$

$$V_y = 2\pi \int_{\alpha}^{\beta} f(t)\, g(t)\, f'(t)\, dt \quad , \quad f(\alpha) < f(\beta)$$

$$= 2\pi \int_{\beta}^{\alpha} f(t)\, g(t)\, f'(t)\, dt \, , \quad f(\beta) < f(\alpha)$$

$$S = \int_{\alpha}^{\beta} \sqrt{f'(t)^2 + g'(t)^2}\, dt$$

$$S_x = 2\pi \int_{\alpha}^{\beta} g(t) \sqrt{f'(t)^2 + g'(t)^2}\, dt$$

$$S_y = 2\pi \int_{\alpha}^{\beta} f(t) \sqrt{f'(t)^2 + g'(t)^2}\, dt$$

(jmf. formler s. 653)