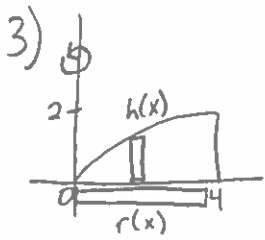


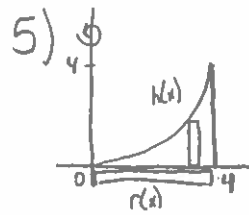
7.3 Volume by Shells

Pg. 462 #'s 3, 5, 7, 23-26



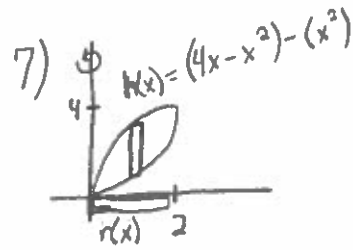
$$V = 2\pi \int_0^4 (x)(\sqrt{x}) dx$$

$$V = 25.6\pi$$



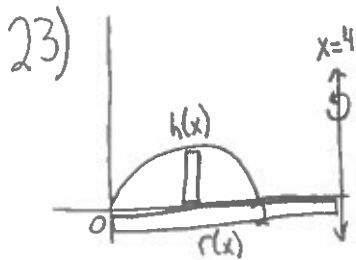
$$V = 2\pi \int_0^4 (x)(\frac{1}{4}x^2) dx$$

$$V = 32\pi$$



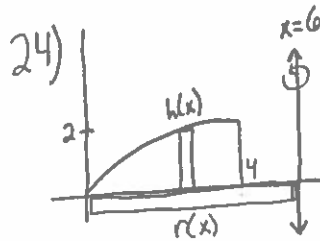
$$V = 2\pi \int_0^2 (x)(4x - 2x^2) dx$$

$$V = 5.3\pi$$



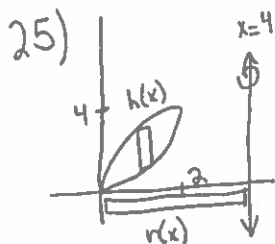
$$V = 2\pi \int_0^2 (4-x)(2x-x^2) dx$$

$$V = 8\pi$$



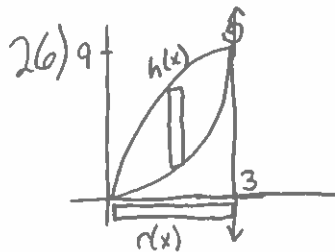
$$V = 2\pi \int_0^4 (6-x)(\sqrt{x}) dx$$

$$V = 38.4\pi$$



$$V = 2\pi \int_0^2 (4-x)(4x-2x^2) dx$$

$$V = 16\pi$$



$$h(x) = (6x - x^2) - (\frac{1}{3}x^3)$$

$$V = 2\pi \int_0^3 (3-x)(6x - x^2 - \frac{1}{3}x^3) dx$$

$$V = 32.4\pi$$