



$$2 - 2\sqrt{x} = 0$$

$$\Leftrightarrow$$

$$x = 1$$

$$V = \int_0^1 \pi f(x)^2 dx = \pi \int_0^1 (2 - 2\sqrt{x})^2 dx =$$

$$= \pi \int_0^1 (4 - 8\sqrt{x} + 4x) dx = \pi \left[4x - \frac{8x^{3/2}}{3/2} + 2x^2 \right]_0^1 =$$

$$= \pi \left(4 - \frac{8}{3/2} + 2 - 0 \right) = \pi \left(6 - \frac{16}{3} \right) = \frac{2\pi}{3}$$