$$\begin{cases} y = x^2 - 4 \\ y = 12 + 6x \end{cases}$$

$$\begin{cases} y = \sqrt{x} \\ y = {}^{x}\mathfrak{s} \end{cases} \quad \text{on } 0|\pi \Longrightarrow \int_{dx}^{0|\pi} \sqrt{x} - {}^{x}\mathfrak{s} = \begin{cases} \frac{2}{3}x^{3/2} + {}^{x}\mathfrak{c} \\ 0|\pi \end{cases} \quad = \frac{2}{3}\pi^{3/2} - 2$$

$$\begin{cases} y = {}^{x}\overbrace{1{:}3{:}-10}^{} \\ y = {}^{x}\overbrace{-1{:}1{:}14}^{} \end{cases} \implies \text{UHS} - \text{DHS} = {}^{x}\overbrace{1{:}3{:}-10}^{} - {}^{x}\overbrace{-1{:}1{:}14}^{} = 2\,{}^{x}\overbrace{1{:}1{:}-12}^{} = 2\,{}^{x}\overbrace{1{:}4}^{}\,{}^{x}\overbrace{1{:}-3}^{} = 0$$

$$\int_{dx}^{-4|3} \text{UHS} - \text{DHS} = 2\int_{dx}^{-4|3} {}^{x}\overbrace{1{:}1{:}-12}^{} = {}^{-4|3}\overbrace{1/3{:}1/2{:}-12{:}0}^{}$$