

NOTE CHECK → 5.3

CYLINDRICAL SHELLS METHOD:

$$V = \int_a^b 2\pi x f(x) dx \quad \text{--- ABOUT } \underline{Y\text{-AXIS}}$$

$$V = \int_c^d 2\pi y g(y) dy \quad \text{--- ABOUT } \underline{X\text{-AXIS}}$$

EX 1: VOLUME - BY $y = \sqrt{x}$, $x=1$, $x=4$, ABOUT Y-AXIS

$$V = \int$$

EX 2: REVOLVE --- $y=x$ & $y=x^2$ ABOUT Y-AXIS

$$V = \int$$

Ex 3: Volume By $x = -y^2 + 6y$ & $x=0$ ABOUT X-AXIS

$$V = \int_c^d 2\pi y g(y) dy$$



$$V = \int$$

Ex 4: ... $y = x^2 + 1$, $y = -x + 1$, & $x=1$ ABOUT Y-AXIS



$$V = \int$$