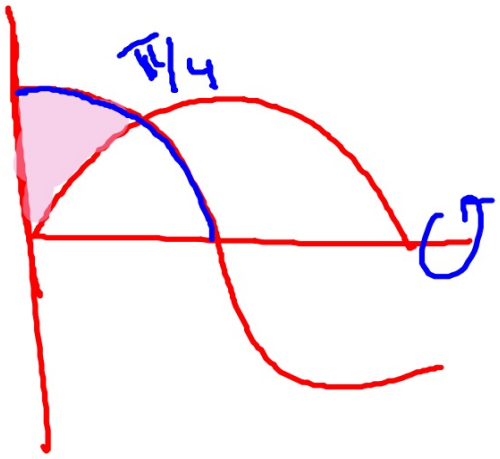
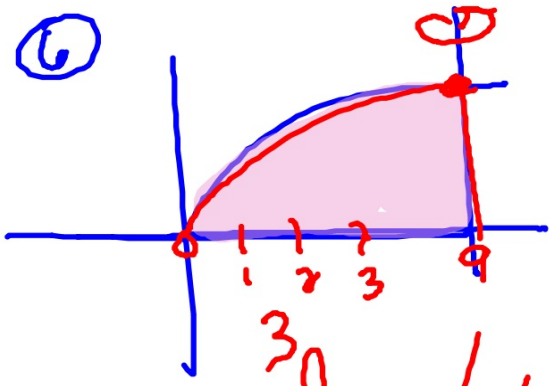


Area: TB

Rotate: TB

$$\int_0^{\pi/6} \pi\left(\left(\cos(x)\right)^2 - \left(\sin(x)\right)^2\right)dx$$

(6)



Area: ~~TB~~ RL
Rotate: ~~RL~~

$y = \sqrt{x}$ ~~$x = \sqrt{x}$~~ $y = \sqrt{9}$

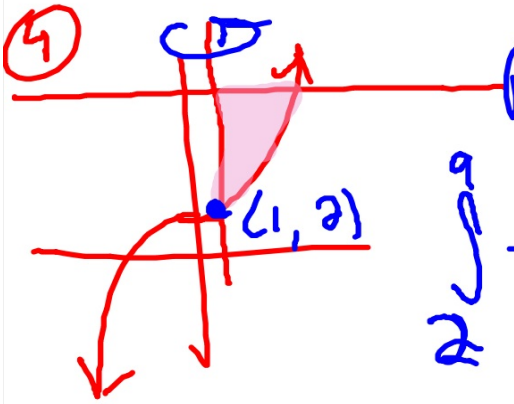
$y^2 = x$

$$\int_0^3 \pi \left((9 - y^2)^2 - (9 - 9)^2 \right) dy$$

$$\int_0^3 \pi \left(81 - 18y^2 + y^4 \right) dy$$

$$\pi \left(81y - 6y^3 + \frac{1}{5} y^5 \right) \Big|_0^3$$

4



Area: RL

Rotate: RL

$$\int_{2}^{9} \pi\left(\sqrt[3]{y-1}^{2} - 1^{2}\right) dy$$

$y = x^3 + 1$ $\quad$ $x = 1$

$y = 1^3 + 1$