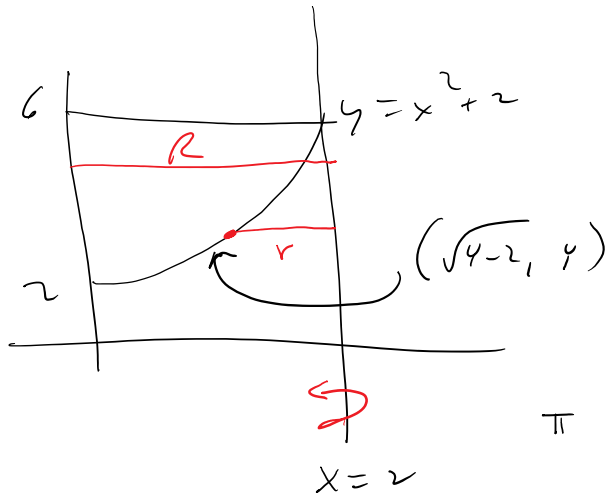


$$\text{Area} = 2 \int_0^3 y^{3.5} dy$$
$$= 2 \left[\frac{y^{4.5}}{4.5} \right]_0^3$$

$$\frac{d}{dx} \int_3^{x^3} \csc t \, dt = \csc x^3 \cdot 3x^2$$



$$y - 2 = x^2 \quad x = \sqrt{y - 2}$$

$$R = 2$$

$$r = 2 - \sqrt{y - 2}$$

$$\pi \int_2^6 2^2 - (2 - \sqrt{y - 2})^2 dy$$