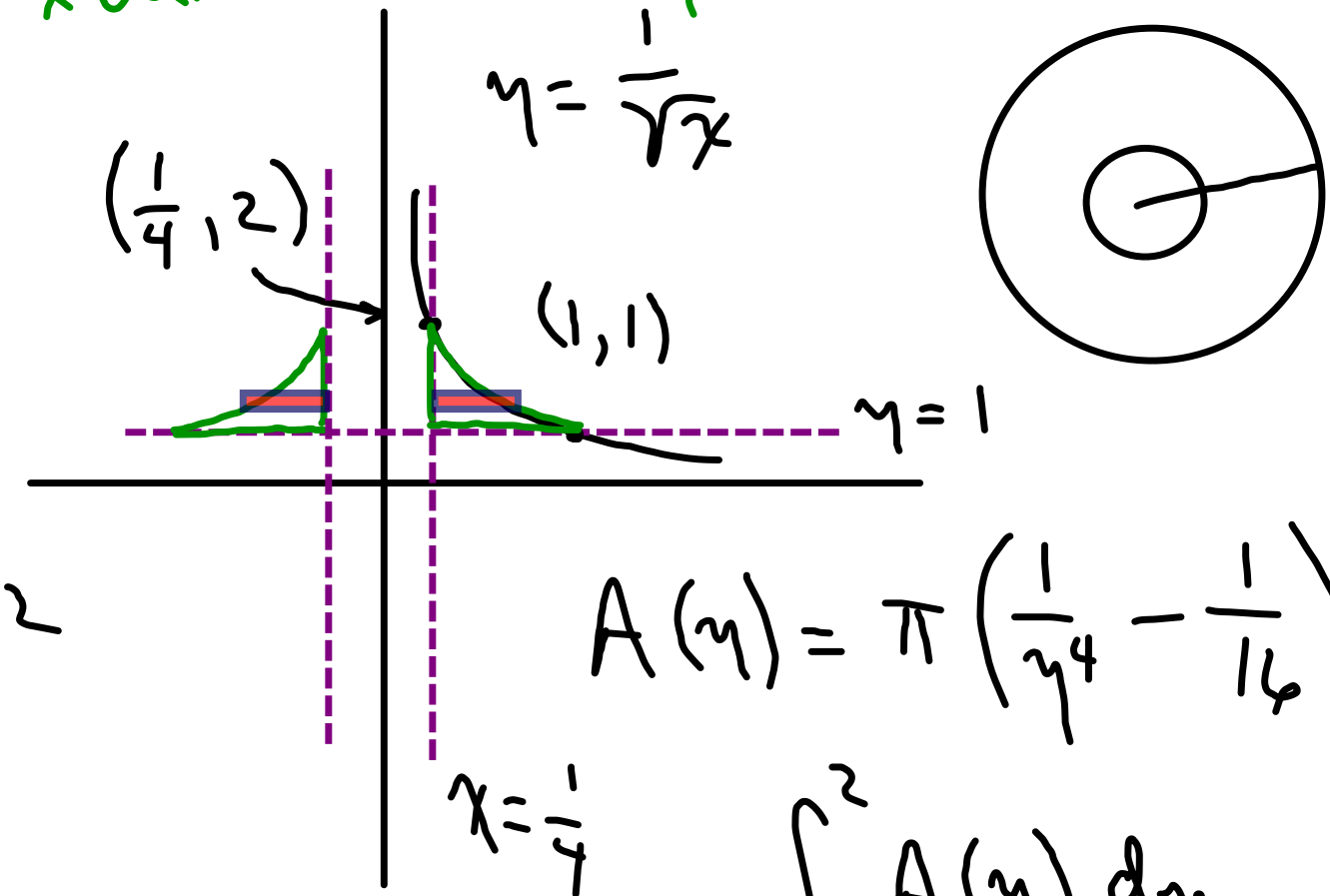
R = some x value $\rightarrow$ $x = \frac{1}{y^2}$

$= \frac{1}{y^2}$

$y = \frac{1}{\sqrt{x}}$



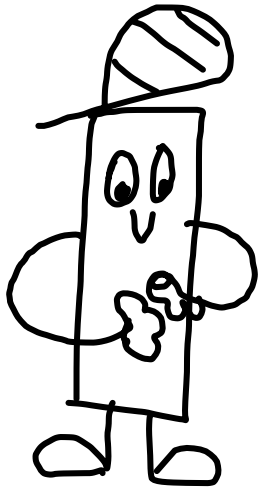
$r = \frac{1}{4}$

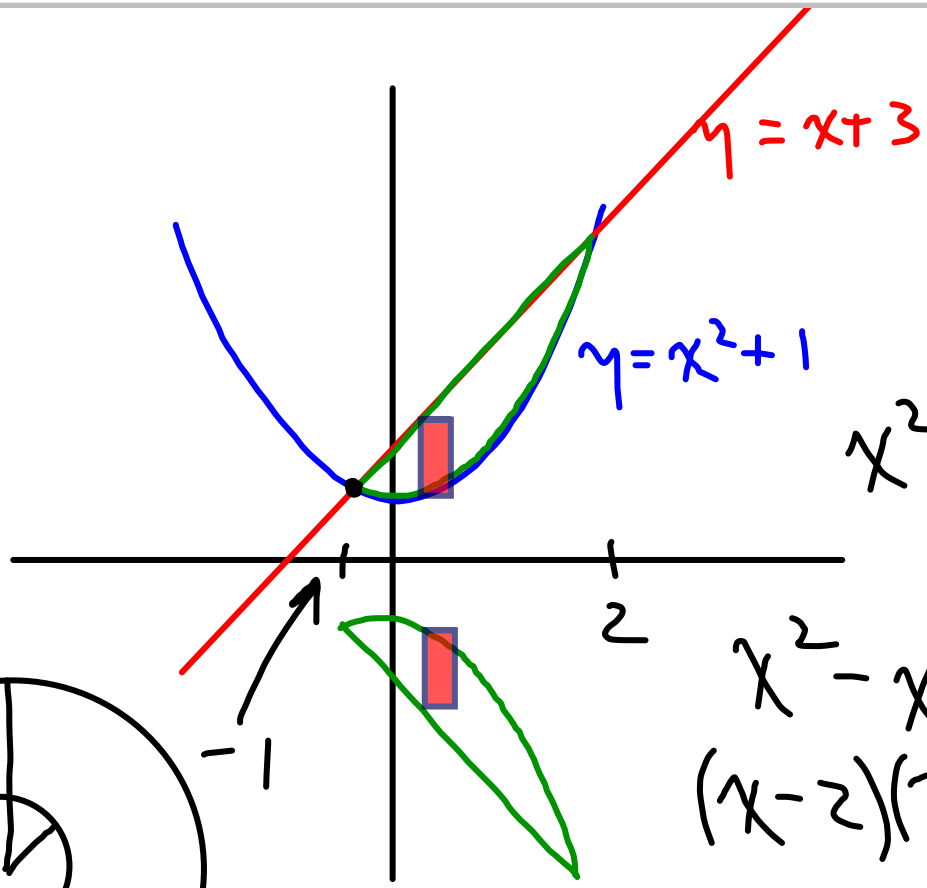
$R(y) = \frac{1}{y^2}$

$r = \frac{1}{4}$

$A(y) = \pi\left(\frac{1}{y^4} - \frac{1}{16}\right)$

$\int_1^2 A(y)\,dy$

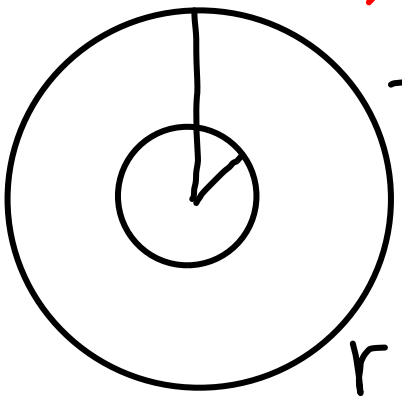




$x^2 + 1 = x + 3$

$x^2 - x - 2 = 0$

$(x-2)(x+1) = 0$



$R = x + 3$

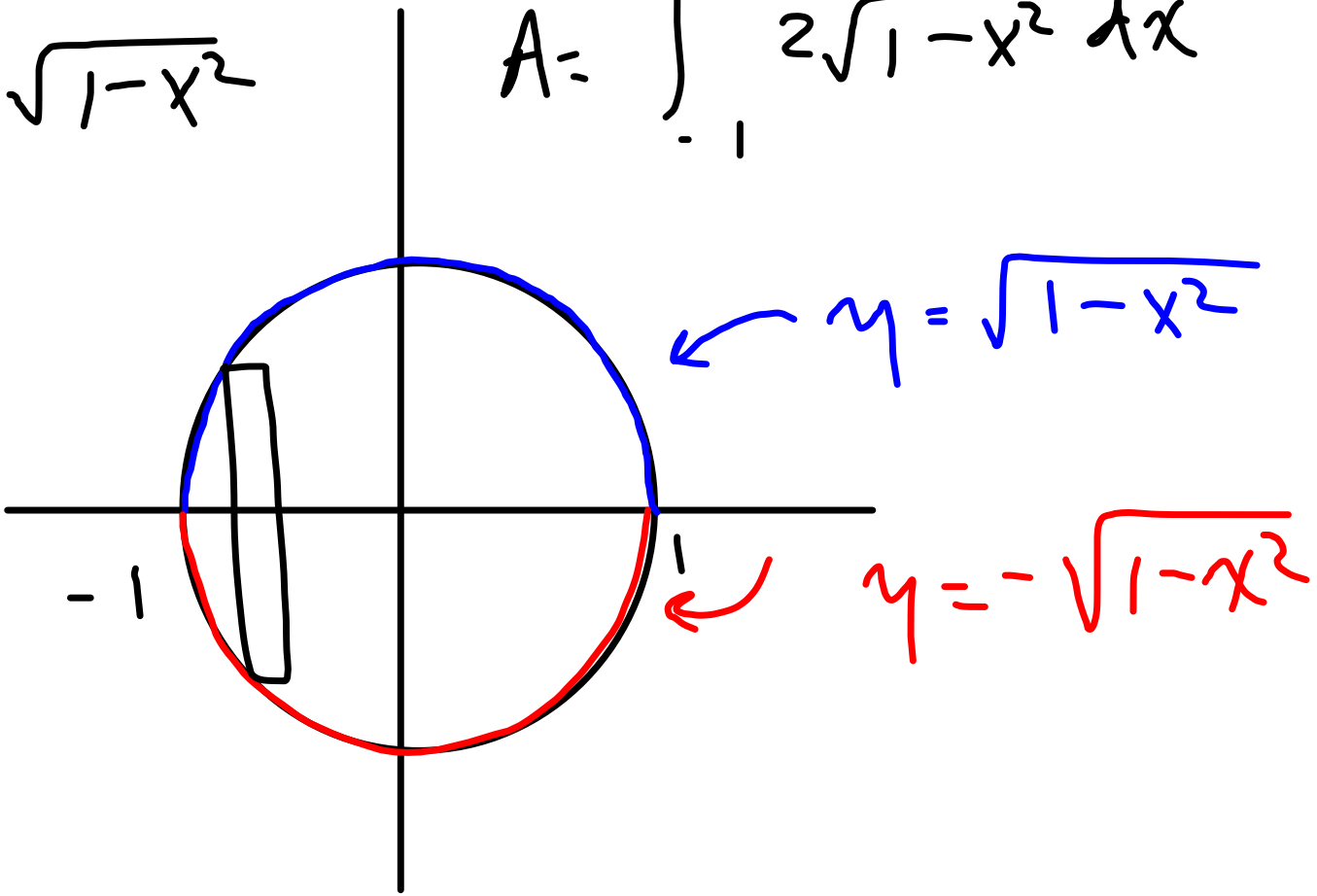
$r = x^2 + 1$

$A(x) = \pi\left((x+3)^2 - (x^2+1)^2\right)$

$$V = \int_{-1}^{2} A(x)\,dx$$

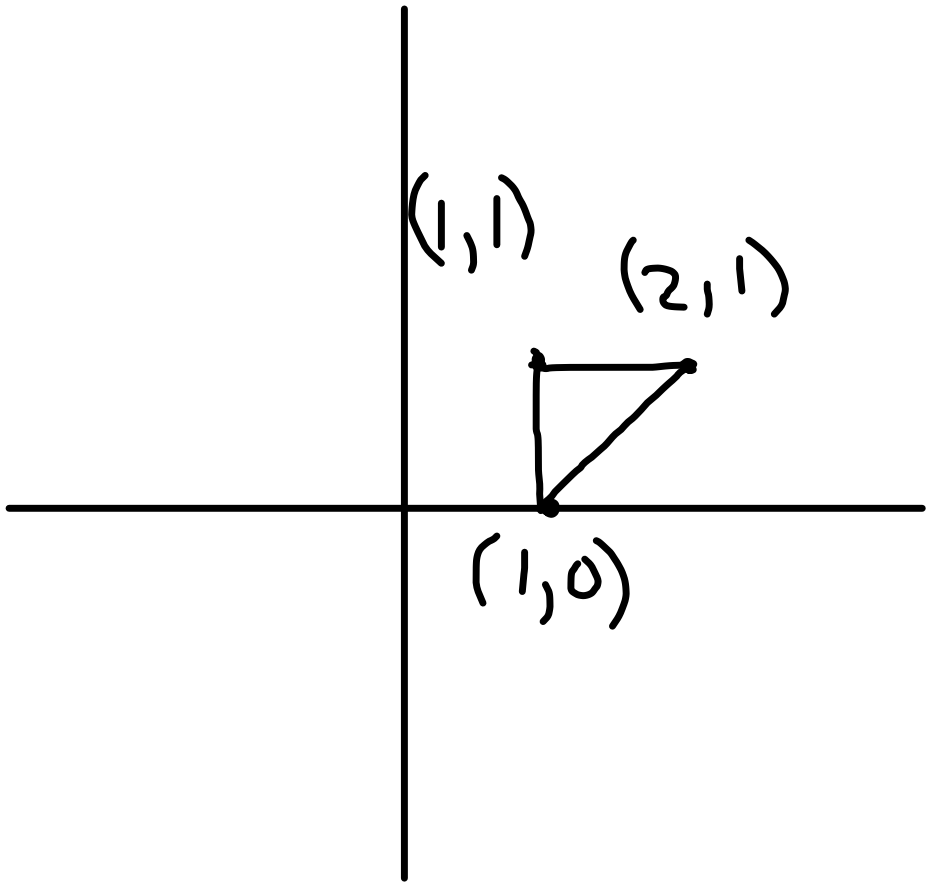
$h = 2\sqrt{1-x^2}$

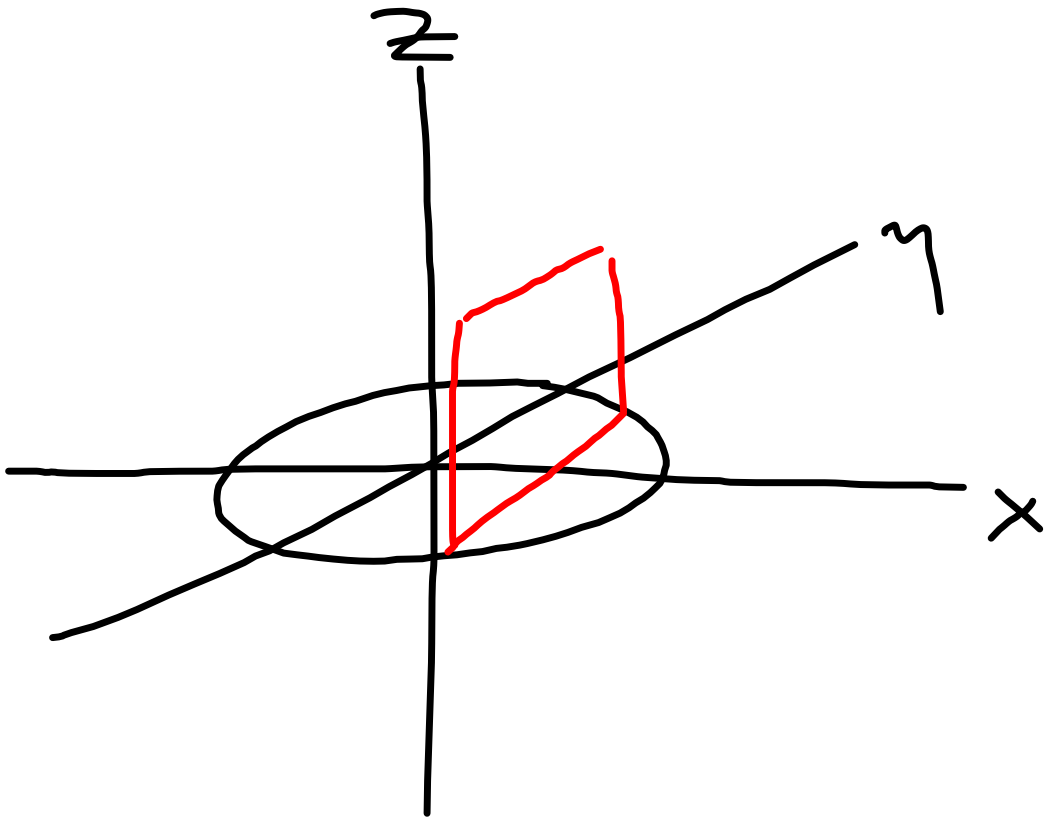
$A = \int_{-1}^{1} 2\sqrt{1-x^2}\,dx$



$y = \sqrt{1-x^2}$

$y = -\sqrt{1-x^2}$


(1,1)
(2,1)
(1,0)


z
y
x