

EX. DETERMINE THE AREA OF THE REGION ENCLOSED BY Y= X2 AND Y= JX



NOW, WHAT ARE WE INTEGRATING? NOTICE THE FOLLOWING:



IN GENERAL.. IF YOURE FINDING THE AREA BETWEEN TWO CURVES FROM XEA TO XED WE HAVE:

SO. THE AREA OF THE REGION ABOVE IS THE FOLLOWING:

$$\int_{0}^{1} \sqrt{x} - \chi^{2} d\chi = \frac{\chi^{3/2}}{3/2} - \frac{\chi^{3}}{3} \Big|_{0}^{1} = \left[\frac{1}{3/2} - \frac{1}{3} \right] - \left[\frac{\frac{3/2}{0}}{3/2} - \frac{O}{3} \right]$$
$$= \frac{2}{3} - \frac{1}{3} = \left[\frac{1}{3} \right]$$

Pg-2