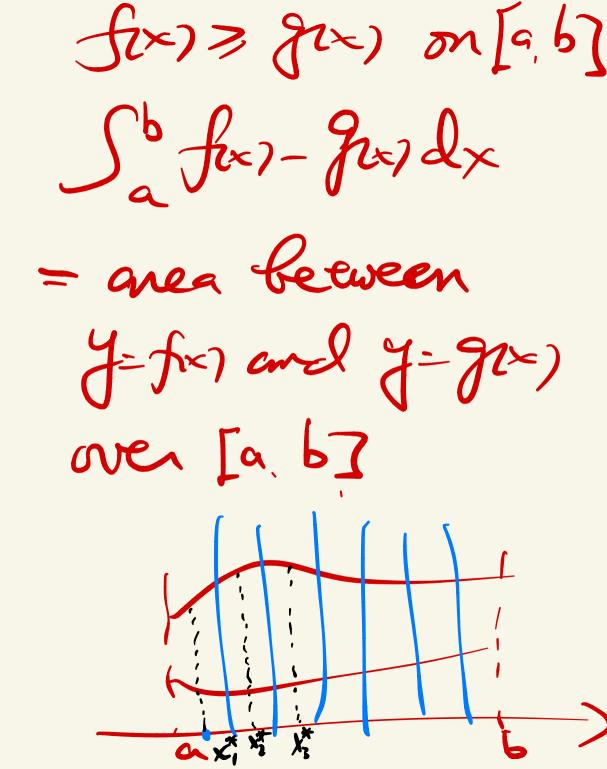
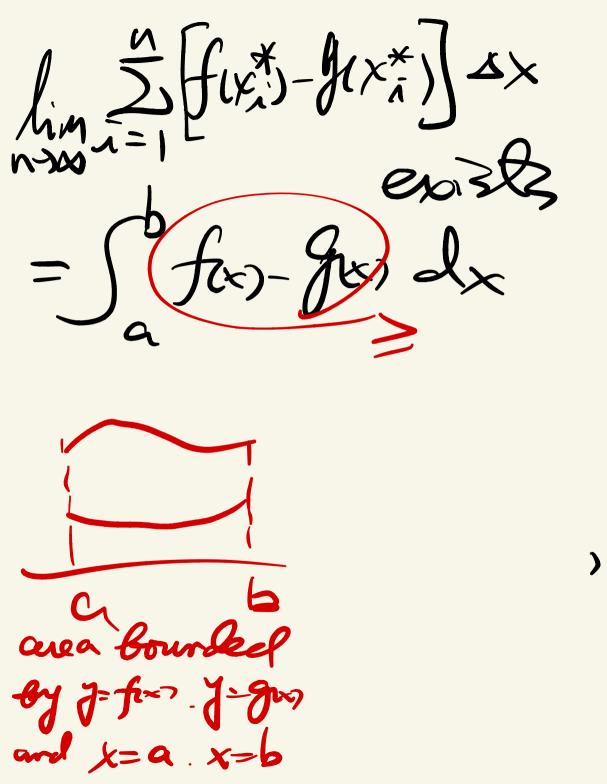
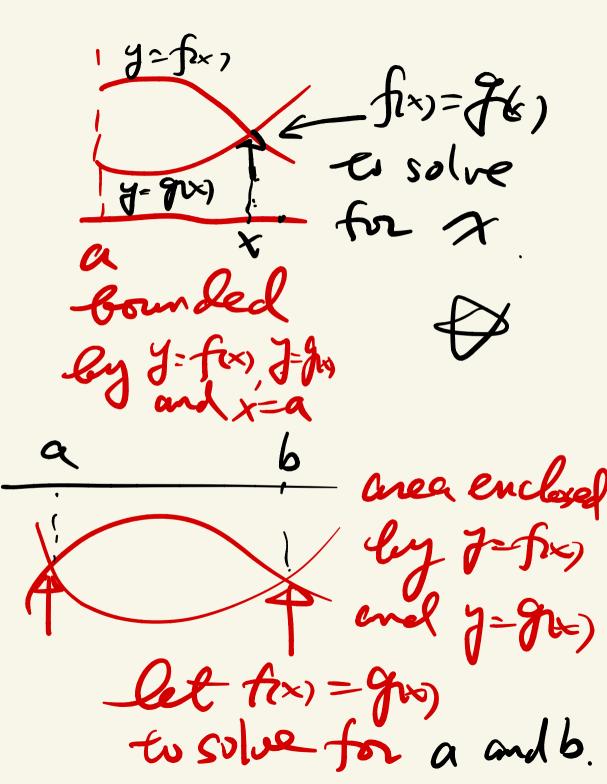


A fa)>0 on [a, b] then Sofwale - area under the graph of 7=fix) over [a, b]







Exs p365

anea of region bounded

ly
$$y=\chi^2+1$$
 and $y=\chi$

and bounded by $\chi=2$

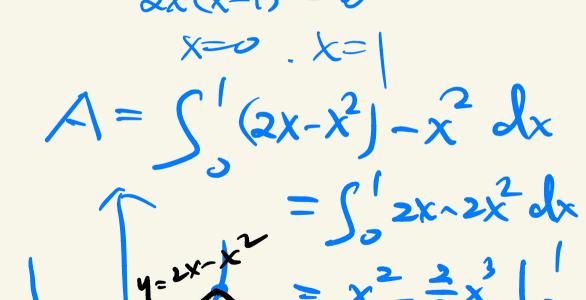
and $\chi=1$.

$$A=\int_0^1 (\chi^2+1)-\chi d\chi$$

$$=\frac{1}{3}\chi^2+\chi-\frac{\chi^2}{2}\left[\frac{1}{3}\chi-\frac{\chi^2}{2}\left[\frac{1}{3}\chi-\frac{\chi$$

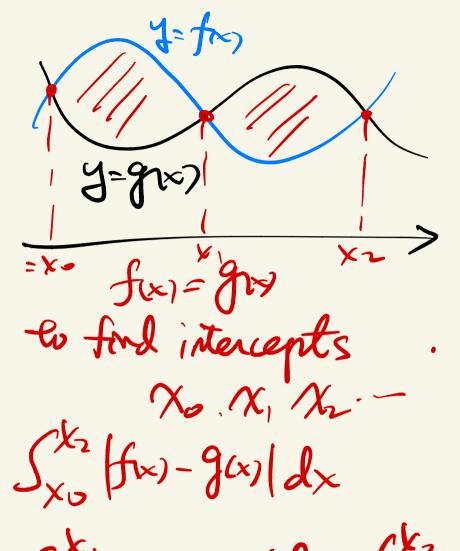
= \frac{1}{2} = \frac{5}{6} \times

Ex2 area enclosed
by
$$y=x^2$$
 and $y=2x-x^2$
Sol: $x=2x-x^2$
 $2x^2-2x=2$
 $2x(x-1)=0$
 $x=0$ $x=1$



 $= \int_{0}^{2} 2x^{2} dx$ $= \int_{0}^{2} 2x^{2} dx$ $= x^{2} - \frac{3}{3}x^{3} \Big|_{0}^{1}$

X=0 = $= -\left(x^2 - 2x + 1 - 1\right)$ = (x-1) - (downward



 $\int_{X_0}^{k_1} |f(x) - g(x)| dx$ $= \int_{X_0}^{k_1} |f(x) - g(x)| dx + \int_{X_1}^{k_2} |f(x) - g(x)| dx$ $= \int_{X_0}^{k_1} |f(x) - g(x)| dx + \int_{X_1}^{k_2} |f(x) - g(x)| dx$ $= \int_{X_0}^{k_1} |f(x) - g(x)| dx + \int_{X_1}^{k_2} |f(x) - g(x)| dx$ $= \int_{X_0}^{k_1} |f(x) - g(x)| dx + \int_{X_1}^{k_2} |g(x) - f(x)| dx$

Onea between Couves

R Top - bottom) olx

2 malon x hinder

= SR 17-90 dx

X=h(y) Wed X= RIY) をけりきんはり