

AP Calculus
Indefinite integrals you should know

$$\int x^n dx = \frac{1}{n+1} x^{n+1} + C, n \neq -1$$

$$\int \cos x dx = \sin x + C$$

$$\int \frac{1}{x} dx = \ln|x| + C$$

$$\int \sin x dx = -\cos x + C$$

$$\int e^x dx = e^x + C$$

$$\int \sec^2 x dx = \tan x + C$$

$$\int a^x dx = \frac{a^x}{\ln a} + C$$

$$\int \csc^2 x dx = -\cot x + C$$

$$\int \sec x \tan x dx = \sec x + C$$

$$\int \csc x \cot x dx = -\csc x + C$$

$$\int \frac{1}{\sqrt{1-x^2}} dx = \sin^{-1} x + C$$

$$\int \frac{1}{1+x^2} dx = \tan^{-1} x + C$$

