

A background image showing the London Eye Ferris wheel in London, with a statue of a man on a horse in the foreground. The sky is blue with some clouds.

October 4

What questions on the test were you best prepared for?


What questions on the test were you least prepared for?

A decorative border of autumn leaves in shades of yellow, orange, and red, arranged in a curved shape along the left side of the slide.

October 4

Students will verbally explain how to evaluate indefinite integrals

(using the words:
antiderivative, constant...)

A decorative border of autumn leaves in shades of yellow, orange, and red, arranged in a curved shape along the bottom right corner of the slide.

Indefinite
Integral

$$\int f(x) dx = F(x) + c$$

↑ no bounds

Where $F'(x) = f(x)$

$$\int 5x^4 dx = x^5 + c$$

$$\int x^3 + \frac{1}{x} dx = \frac{x^4}{4} + \ln(x) + c$$

$$\int x^n dx = \frac{x^{n+1}}{n+1} + c$$

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

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

$$\int a^x dx = \frac{a^x}{\ln(a)} + c$$

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

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

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

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

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

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

$$\int \frac{1}{\sqrt{1-x^2}} dx = \arcsin(x) + c = \sin^{-1}(x) + c$$

$$\int \frac{1}{1+x^2} dx = \arctan(x) + c = \tan^{-1}(x) + c$$

$$\int \frac{1}{|x|\sqrt{x^2-1}} dx = \operatorname{arcsec}(x) + c = \sec^{-1}(x) + c$$

$$\int \tan x dx =$$

$$\int \cot x dx =$$

$$\int \sec x dx =$$

$$\int \csc x dx =$$

$$\int k \cdot f(x) dx = k \int f(x) dx$$

$$\int -f(x) dx = -\int f(x) dx$$

$$\int f(x) \pm g(x) dx = \int f(x) dx \pm \int g(x) dx$$

Pg 281
#9-28

Practice Problem Set #10