

17 Lecture - MTH101

Important Mcqs

What is the derivative of the sine function?

- a. cosine function
- b. tangent function
- c. cosecant function
- d. secant function

Answer: a. cosine function

What is the derivative of the cosine function?

- a. sine function
- b. tangent function
- c. cosecant function
- d. negative sine function

Answer: d. negative sine function

What is the derivative of the tangent function?

- a. cosine function
- b. cosecant function
- c. square of the secant function
- d. negative square of the cosecant function

Answer: c. square of the secant function

What is the derivative of the cotangent function?

- a. sine function
- b. cosine function

c. negative square of the cosecant function

d. negative square of the secant function

Answer: c. negative square of the cosecant function

What is the derivative of the secant function?

a. cosecant function

b. tangent function

c. product of the secant and tangent functions

d. negative product of the secant and tangent functions

Answer: c. product of the secant and tangent functions

What is the derivative of the cosecant function?

a. secant function

b. cotangent function

c. negative product of the cosecant and cotangent functions

d. product of the cosecant and cotangent functions

Answer: c. negative product of the cosecant and cotangent functions

What is the derivative of $\sin(x) + \cos(x)$?

a. $\cos(x) - \sin(x)$

b. $\sin(x) + \cos(x)$

c. $\sin(x) - \cos(x)$

d. $\cos(x) + \sin(x)$

Answer: a. $\cos(x) - \sin(x)$

What is the derivative of $\tan(x) * \sec(x)$?

a. $\sec^2(x)$

b. $\sec(x) * \tan(x)$

c. $\sec(x) + \tan(x)$

d. $\tan^2(x)$

Answer: b. $\sec(x) * \tan(x)$

What is the derivative of $\cos(2x)$?

a. $-2\sin(2x)$

b. $-\sin(2x)$

c. $2\sin(2x)$

d. $-2\cos(2x)$

Answer: d. $-2\sin(2x)$

What is the derivative of $\arcsin(x)$?

a. $1/\sqrt{1-x^2}$

b. $-1/\sqrt{1-x^2}$

c. $1/(1-x^2)$

d. $-1/(1-x^2)$

Answer: a. $1/\sqrt{1-x^2}$