## 17 Lecture - MTH101

## Important Subjective

What is the derivative of the sine function?
Answer: The derivative of the sine function is the cosine function.

What is the derivative of the cosine function?
Answer: The derivative of the cosine function is the negative of the sine function.

What is the derivative of the tangent function?
Answer: The derivative of the tangent function is the square of the secant function.

What is the derivative of the cotangent function?
Answer: The derivative of the cotangent function is the negative of the square of the cosecant function.

What is the derivative of the secant function?
Answer: The derivative of the secant function is the product of the secant and tangent functions.

What is the derivative of the cosecant function?
Answer: The derivative of the cosecant function is the negative of the product of the cosecant and cotangent functions.

How do you find the derivative of a product of two trigonometric functions?
Answer: You can use the product rule to find the derivative of a product of two trigonometric functions.

How do you find the derivative of a sum of two trigonometric functions?
Answer: You can use the sum rule to find the derivative of a sum of two trigonometric functions.

## How do you find the derivative of the inverse trigonometric functions?

Answer: You can use the chain rule to find the derivative of the inverse trigonometric functions.

How do you find the derivative of a composition of a trigonometric function and another function?
Answer: You can use the chain rule to find the derivative of a composition of a trigonometric function and another function.

