20 Lecture - MTH101

Important Subjective

What is the derivative of ln(x)?

Answer: The derivative of ln(x) is 1/x.

What is the derivative of e^x?

Answer: The derivative of e^x is e^x.

What is the derivative of ln(u), where u is a function of x?

Answer: The derivative of ln(u) is u'/(u).

What is the derivative of e^u, where u is a function of x?

Answer: The derivative of e^u is e^u * u'.

What is the derivative of ln(ax), where a is a constant?

Answer: The derivative of ln(ax) is 1/(xln(a)).

What is the derivative of e^(ax), where a is a constant?

Answer: The derivative of e^(ax) is ae^(ax).

What is the derivative of ln(x^n), where n is a constant?

Answer: The derivative of ln(x^n) is n/x.

What is the derivative of e^(nx), where n is a constant?

Answer: The derivative of e^(nx) is ne^(nx).

What is the derivative of ln(e^x)?

Answer: The derivative of ln(e^x) is 1.

What is the derivative of e^(ln(x))?

Answer: The derivative of e^(ln(x)) is x.