20 Lecture - MTH101

Important Subjective

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(x)?

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.