20 Lecture - MTH101

Important Mcqs

What is the derivative of ln(x)?

a) x

b) 1/x

c) ln(x)

d) 0

Solution: b) 1/x

What is the derivative of e^x?

a) x

b) e^x

c) ln(x)

d) 0

Solution: b) e^x

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

a) 1/u

b) u/ln(u)

c) u'/ln(u)

d) ln(u)/u'

Solution: c) u'/u

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

a) e^u

b) u'e^u

c) e^(u/x)

d) e^(u^2)

Solution: b) u'e^u

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

a) 1/xln(a)

b) a/x

c) xln(a)

d) 0

Solution: a) 1/xln(a)

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

a) ae^x

b) e^(ax)

c) x^a

d) a^x

Solution: a) ae^(ax)

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

a) nln(x)

b) n/x

c) x/n

d) 0

Solution: b) n/x

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

a) e^(nx)

b) n^x

c) ne^(nx)

d) e^(n^x)

Solution: c) ne^(nx)

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

a) x

b) 1

c) e^x

d) ln(x)

Solution: b) 1

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

a) x

b) e^x

c) ln(x)

d) 1

Solution: a) x