1. Find the solution of the differential equation dy/dx=x^3 -x

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|  |

with the initial condition y(0) = -3.

Type your answer here:

y(x) =

1. Find the solution of the differential equation dy/dt=t^2 / (3y^2)

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|  |

with the initial condition y(0) = 8.

Type your answer here:

y(t) =

1. Find the solution of the differential equation dy/dx=(x=2)y^(1/2)

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|  |

with the initial condition y(0) = 1.

Type your answer here:

y(x) =

1. Find the derivative of the function f(x) = ln(x + 1)/ln(2x + 1)
2. Evaluate the following indefinite integral:

http://cow.temple.edu/~cow/images/integralsigns/SmallIntegral.GIFex eex dx =

My answer: (x2)ex + e - 2xex + e + 2ex + e “Wrong”

1. Evaluate the following expression: sec(arctan(10))
2. Find the derivative of the function

f(x) = arccot(tan(2x + 3))

Enter your answer below:

f '(x) =

My answer: -2sec^2((2x+3))/tan^2(2x+3)+1 “Wrong”