(1)In Mathematics, dynamic equation can refer to ;

(A)difference equation in discrete time

(B)differential equation in continuous time

(C)time scale calculus in combined discrete and continuous time .

(2) $y=A*t*e^x$

$dy/dx=x*A*t*e^{-x}$

$A=1/x*t*e*dy/dx$

$A=x/x*t*e*dy/dx$

Where $dy/dx=A*t*e^{-x}$

$A=e^{-x}*e^{-x}$

$A=e^{-2x}$

Then,

$dy/dx=x(e^{-2}*x)t*e^{-x}$

$dy/dx=(e^{3}*x)x*t$