

2.1 Solving 1st order linear diffeqns
(intro only. See Wednesday for real lesson)

Monday, August 31, 2020

2:14 PM

$$EX: \quad t^3 y' + 3t^2 y = 4$$

check
this
step

product rule

$$(t^3 y)' = 4$$

Get rid of derivative:

$$\int (t^3 y)' dt = \int 4 dt$$

$$[t^3 y = 4t + C] / t^3$$

general
soln

$$y = 4t^{-2} + Ct^{-3}$$

HW 2

2.2 :

①

$$y' = \frac{x^2}{1}$$

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1.2



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