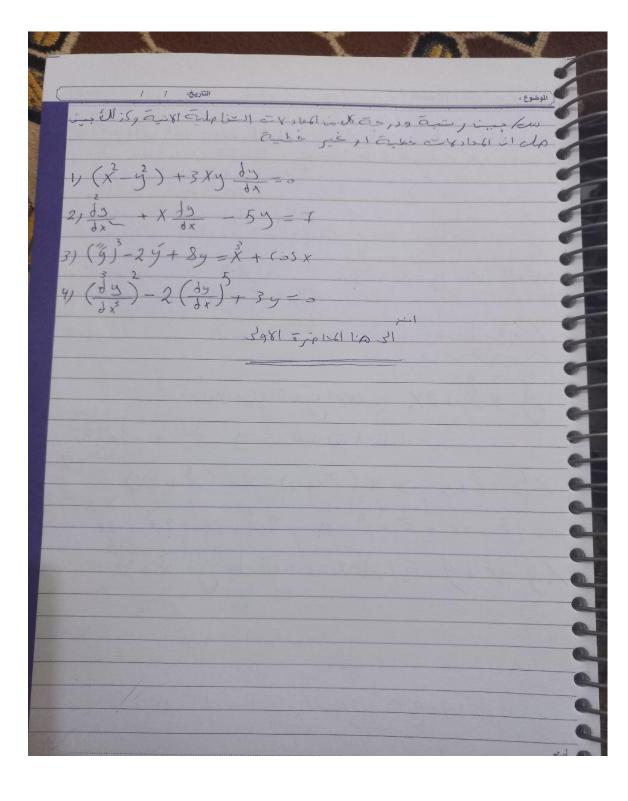
التاريخ Differential Equation (0. Partial diff 20139(x) 0× 0. D. E W 1000 (X) CI a will y Examples

الموضوع،

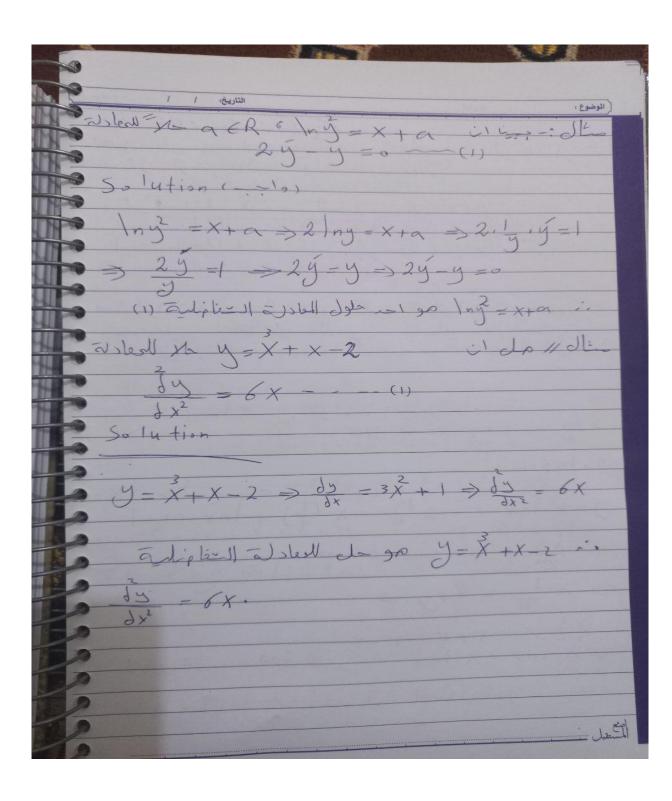
التاريخ: دكات النفاطلين الفطية Linear of) E. م التي eolly> f(x) 2/590 005 +a, y) + ... an -1 y + an y = 0 (2) المعادلة (١٤) معادلة د فا فيله Lella Moleshar 1; E as 661 to 159 398 az 111 co 3,81 ax plisquied y 2x 21 9 (25) Lo y sol

التاريخ: $(y + (\sin x)y = x^2 (\sin x + 2) is anison sie along$



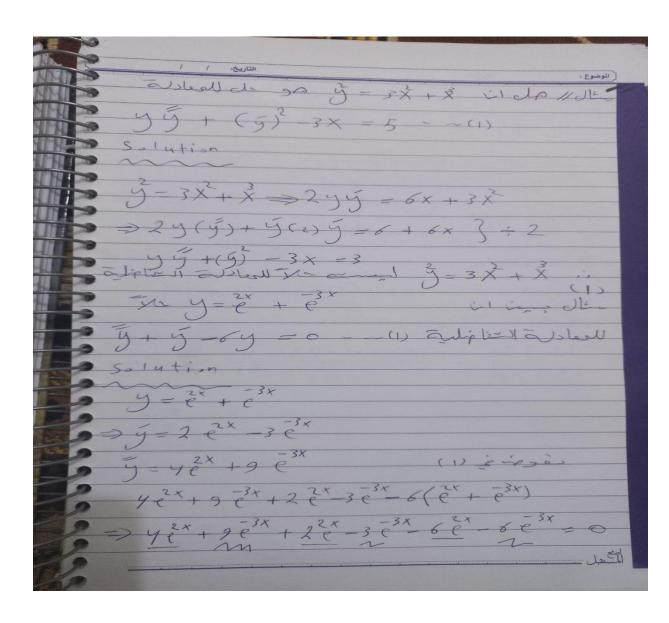
التاريخ: ۱۱ ۱۱ ۱۱ ۱۲)>،> <12 - -الموضوع : an ordinary differential eluation asyellaip is a saliplish asled or je

التاريخ، ان - المعادلة من الرشة النائية و من ان المعامل عابت الخراء المعاملة النائية وهذ Xdo = X +y , X >0 ~(1) Solytion ! > dy = |n x (1) sippos ix-xalx= Caclardel Belcharp



التاريخ: / / =3(052x+25in2x - 1) de liby-1014 مو ملة للمعادلة المتعامِلية +44 =0 (1) Solytion 3(052x + 25 in 2x => +4005 2x 12 cos 2x - 8 Sin 2x > 52x - 8 Sin2x + 4 (3 cos2x + 2 Sin2x) 552x - 85in2x + 125052x + 85/n2x Tololed to y=3 cosex +2 Sin (1) Tarliplical

التاريخ: / / 3(052x +25in 2x il de libs -1 dle ali xa 9. -12 < 05 2x - 8 Sin 2x > 12 (052x - 8 Sin2x + 4 (3 (052x + 2 Sin2x) 2 CoS2x - 85 in2x + 12 5652x + 85/n2x Walest The y=3 casex +2 Sin



التاريخ: / / Weelch Kilghus (1) 2x -3x

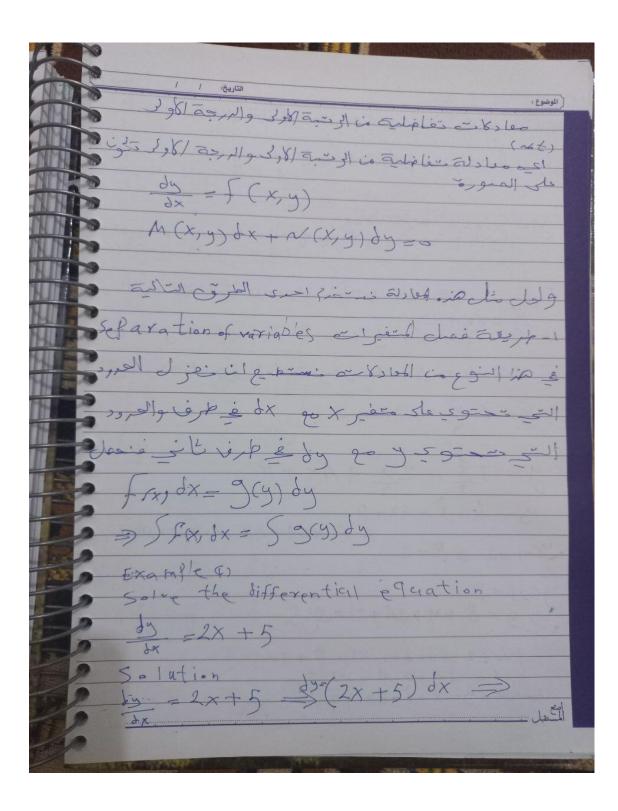
التاريخ: / asled x 2x + y = 1 y=1 >> 4x+2y5 =

yg=-2(1) → ýg= 200222222222 2 Tolest do 22, y asked to yx = sinsx il dallo x 9 + 2 9 + 25 9x = Solution Sinsx => y(1) + x y = 5 (3) 5x y + xy = 5 cos 5x == 25 Sin5x => 29+x9+25 Sin 5x = xg+2g+25 yx=0

Delay is a series of particular continued of the series of

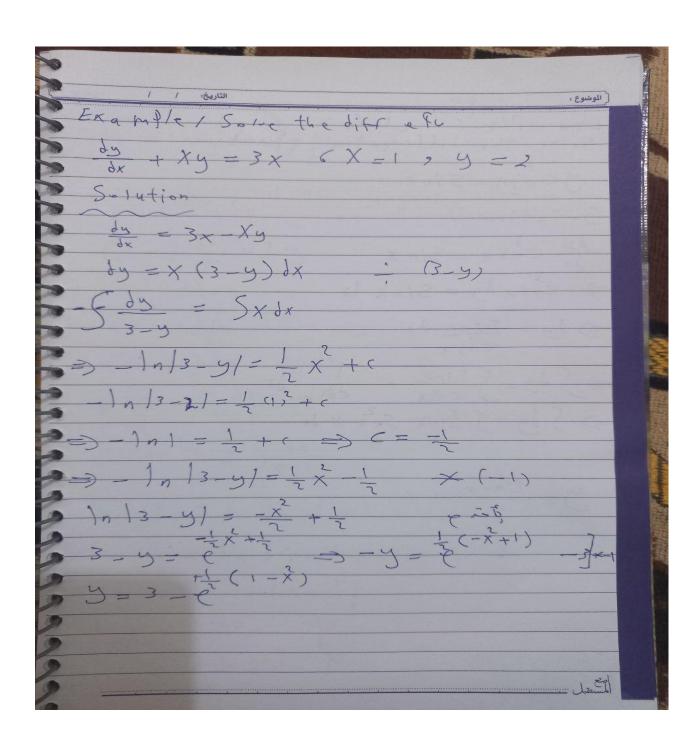
التاريخ؛ / / (الموضوع ، tx/ find the hiff crential equation from the general Solution. in " , o (1) 2) sell dole" , adal)

Hab Hilas Walch IL "alqLE X Stamiling asled in police = 6 × +2x +A + 2 x + A x + B X+AX+B Y(0) =2 => B=2)(21=8 +4+2A+2=8 12+2+2A=8=> 14-8+2A=0 Golden y= x + x + 3x + 2



التاريخ: / / الموضوع : (25 y) x (2n+1) TT 9 (05 y + 0 du = Sinx Sint dx => Szecydy = Ssinxdx => المنع قبل ____

التاريخ: / Era myle BERRELESS STATISTICS OF THE STATE OF THE STA the differential equation Solution 2x+5 dy=2x & dx; e $\frac{dy}{dy} = \frac{2x}{e}dx \implies e^{-\frac{2x}{2}}dx \implies$ = 1 e + e ! X=0, y= $=\frac{3}{2}\times -3$ \times (-1) $= \frac{1}{e^{5}} \times \frac{3 - e^{x}}{2} \Rightarrow e(3 - e^{x}) = 2$ $= \frac{2}{3 - e^{x}} = \frac{3}{2} \times \frac{3}{2} = \frac{3}{2} = \frac{3}{2} \times \frac{3}{2} = \frac{3}{2} \times \frac{3}{2} = \frac$



Example 1) Solve the differential equation Suppose V= 5 dx = 32 -1 xdv = 32-1 $\frac{dx}{x} = \frac{2v}{2} dv \qquad \sqrt{n|x|} = \frac{1}{n} |x| = \ln |x| + \ln |x|$ In/x1=In/c(2-1)/ e ist $\begin{array}{c} \times = \pm \left(\left(\frac{1}{2} - 1 \right) - 1 \right) \times = \mp \left(\left(\frac{1}{2} \right)^{2} - 1 = \pm \left(\left(\frac{1}{2} \right)^{2} \right) \\ = \pm \left(\left(\frac{1}{2} - \frac{1}{2} \right) \right) \end{array}$

