REVIEW FOR TEST TWO, MTH 205, SPRING 008

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Name————————————, Id. Num.————————————————————-, Score

QUESTION 1. *1)Use variation method to solve* $y^{(2)} + 4y = sin^2(2x)$

2)solve $y' + (4/x)y = x^4$. *(do it in variation, then do it using FIRST ORDER LINEAR method)*

3)Solve $x^2y^{(2)} - xy' = x^3e^x$

4)Solve $(x/y)y' = xy - 1$

5)solve $(x^2 - x)y' - y = x$

6)Solve $(x^2-1)y^{(2)}-2xy'+2y = (x^2-1)^2$, *if* $y = x$ *is a solution to the associated homogeneous system.*

7) Solve $y' = (1/(x + y^2))$

8) Solve $\sqrt{y}y' + \sqrt{y^3} = 1$

*9)APPLICATIONS ON PAGE 98 (***Must know how to do 2, 5, 10, 13, 15, 17, 19, 21, 25, 26)**

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