

Instructor: Leopoldo P. Franca

NAME: _____

TEST # 1:

Please show all your work in the test. Gussed answers are NOT acceptable. You may use calculators. Good luck!

(25 pt) 1) Solve $\frac{dy}{dx} = e^{(2y+10x)}$.

(25 pt) 2) Solve $x dy - (y + \sqrt{x^2 + y^2}) dx = 0$, $y(1) = 0$.

(25 pt) 3) Solve $(y^2 - 2 \sin(2x)) dx + (1 + 2xy) dy = 0$, $y(0) = 1$.

(25 pt) 4) Solve $\frac{dy}{dx} + 3x^2y = e^{-x^3}$, $y(0) = 2$.