

MTH 3311 Test #3

DUE: APRIL 24, 2020 11:59 PM

Pat Rossi

Name _____

Show CLEARLY how you arrive at your answers!

1. Solve: $y'' + 3y' - 4y = 2 \sin(x) + 4 \cos(x)$

2. Solve: $y'' - 6y' + 9y = 4x^2 + 3x - 9$

3. Solve: $y'' - 4y' + 20y = e^{3x}$

4. Solve: $4y'' - 4y' + y = e^{\frac{1}{2}x} \ln(x)$

5. Solve: $x^2y'' - xy' - 8y = 3x^3 - 2x + 5$