

14 Feb, 2014
MATH 1005D
Total marks: 23

TEST 2

1. Solve the non-homogeneous equation by the *method of undetermined coefficients* [6 marks]:

$$y'' - 2y' = 2 - 3x$$

2. Solve the following non-homogeneous equation by *variation of parameters* [8 marks]:

$$y'' - 4y' + 4y = 6xe^{2x}$$

3. Solve the following non-homogeneous equation by *variation of parameters* [9 marks]:

$$4x^2y'' + 4xy' - y = x$$