**BIL-622**

**Homework 1**

Find solution of the following equations using at least two methods

|  |  |  |
| --- | --- | --- |
| N | equation | method |
| 1 | у'=(xy2+x)/(y-x2y) | 1,4 |
| 2 | у'=(1-2x)/y2 | 2,4 |
| 3 | у'=exp(x)-1 | 3,5 |
| 4 | у'=(y2-y)/x | 1,5 |
| 5 | y'=(1+y)/(tg(x) | 2,5 |

Here,

1 – Euler method

2 – modified Euler method 1

3 – modified Euler method 2

4 - Runge–Kutta method 3

5 - Runge–Kutta method 4