

## Suggested problems 25

Instructor: Alena Erchenko

1. Convert each linear equation into a system of first order equations. Rewrite the system you get into a matrix-vector equation.

(a)  $y'' - 4y' + 5y = 0$ ;

(b)  $y^{(4)} + 3y''' - \pi y'' + 2\pi y' - 6y = 11$ .