Read each problem **very carefully** before starting to solve it and do only what is asked.
Each problem is worth around 5 points. It is necessary to show **all** your work. Correct
answers without explanations are worth 0 points. GOOD LUCK!!

1. [6 points] Solve the system

$$\boldsymbol{x}' = \begin{pmatrix} -1 & -2 \\ 2 & -1 \end{pmatrix} \boldsymbol{x}.$$

2. [6 points] Solve the system

$$x' = \begin{pmatrix} 2 & -1 \\ 1 & 4 \end{pmatrix} x.$$