1. Use the Wronskian to verify that $\tan x, \cot x$ are linearly independent functions on $(0, \pi/2)$.

2. Find the general solution of $y'' - 3y' + 4y = 0$. 
3. Find the general solution of \( y^{(4)} + 2y'' + y = 0 \).

4. Determine the form of a particular solution of the DE: \( y'' + y = x \sin x - \sin x \).