1. Solve $3y'' - 11y' - 4y = 0$ with $y(0) = 2$ and $y'(0) = 0$.

2. Solve $y'' - 4y' + 5y = 0$ with $y(0) = 1$ and $y'(0) = -1$.

3. Compute the Wronskian of e^t and te^t.

4. [3.2.24] Verify that $y_1 = \cos 2t$ and $y_2 = \sin 2t$ are both solutions to $y'' + 4y = 0$. Do y_1 and y_2 form a fundamental set of solutions?

5. [Misc. Prac.] Solve $\frac{dy}{dx} = 3 - 6x + y - 2xy$.