

Reduction of Order.

Directions: Do one step, and then pass it along to the next student. You do not have to solve the entire problem. If you see a mistake, correct it. If you are not sure, discuss. I will check back.

Solve the problem below.

1. $xy'' - y' + (1 - x)y = 0$, $y_1 = e^x$

2. Find the Wronskian for the fundamental set above.

3. Use that information to solve $xy'' - y' + (1 - x)y = 4x^2e^x$ using any appropriate method.