Review for Exam II

Solve. You may use WolframAlpha or other software to help you factor polynomial equations of degree greater than 2. You will be allowed to do that on the midterm exam, too.

1. $y'' - 5y' + 6y = 0$

2. $y'' - 5y' + 6y = e^t$

3. $y'' - 5y' + 6y = e^{2t}$

4. $y'' - 4y' + 4y = 0$

5. $y'' - 4y' + 4y = e^t$

6. $y'' - 4y' + 4y = e^{2t}$

7. $y'' - 4y' + 13y = 0$

8. $y'' - 4y' + 13y = \sin t$

9. $y'' - 4y' + 13y = \sin(3t)$

10. $y^{(5)} - 3y^{(4)} + 4y''' - 4y'' + 3y' - y = 0$

11. $y^{(5)} - 3y^{(4)} + 4y''' - 4y'' + 3y' - y = \sin t$

12. $y'' - 5y' + 6y = 0$, $y(0) = 1$, $y'(0) = 2$