Lec 33 Worksheet

Solve the following differential equation and solve the IVP or BVP if given.

1. $y'' + 4y' + 4y = 0$
2. $y'' + 7y' + 6y = 0$
3. $y'' + 5y = 0,\ y(0) = 1/2,\ y'(0) = 1$
4. $y'' - y' = 0,\ y(0) = 2,\ y(2) = 2$
5. $3y'' + 4y' + 2y = 0$
6. $y'' - 3y' + 2y = 0,\ y(1) = 1,\ y(2) = 3$
7. $4y'' + y' + y = 0,\ y(0) = 1,\ y'(0) = 2$
8. $4y'' + y = 0$
9. $2y'' + 6y' + 2y = 0$
10. $y'' + y = 0,\ y(1) = 0,\ y'(1) = 1$
11. $y'' - y' - y = 0$
12. $y'' + y = 0,\ y(0) = 0,\ y(\pi) = 1$