## Linear Analysis II Exercise Set 5

**1.** Solve 
$$x^2y'' + 5xy' + y = 0$$
.

**2.** Solve 
$$x^2y'' + 5xy' + 6y = 0$$
.

**3.** Solve 
$$4x^2y'' + 3y = 0$$
.

**4.** Solve 
$$x^2y'' - 5xy' = 0$$
.