

```
{J0} = NDSolve[  
  x^2 y''[x] + x y'[x] + x^2 y[x] == 0  
  && y[1] == 1 && y'[1] == 0,  
  y[x], {x, 1, 50}  
];  
Plot[Evaluate[y[x] /. J0], {x, 1, 50}]
```

