

```

{V0} = NDSolve[
  V''[x] + (1 +  $\frac{1}{4x^2}$ ) V[x] == 0
  && V[1] == 1 && V'[1] == 1/2,
  V[x], {x, 1, 50}
];
Plot[Evaluate[{y[x] /. J0, V[x] /. V0}], {x, 1, 50}]

```

