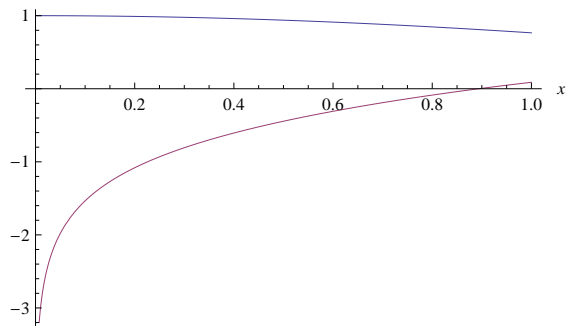


```

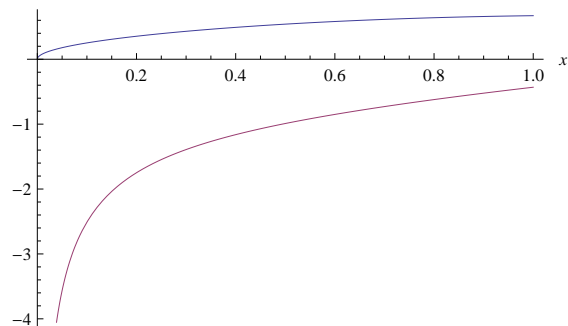
GraphicsGrid[Partition[Table[
  Plot[{BesselJ[α, x], BesselY[α, x]}, {x, 0, 1},
    AxesLabel → Automatic, PlotPoints → 100,
    PlotLabel → StringReplace["y'' +  $\frac{1}{x}$ y' + (1- $\frac{\alpha^2}{x^2}$ )y = 0",
      "α" → ToString[α]]],
  {α, 0., 1.5, 0.5}
], 2]]

```

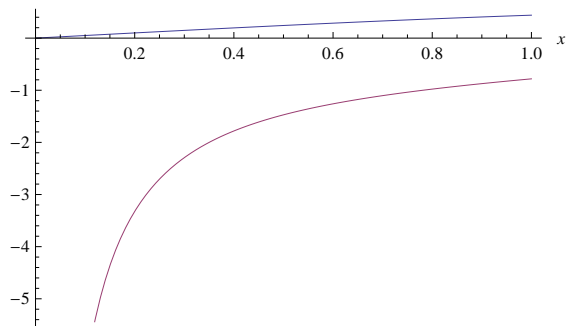
$$y'' + \frac{1}{x}y' + (1 - \frac{0.2^2}{x^2})y = 0$$



$$y'' + \frac{1}{x}y' + (1 - \frac{0.5^2}{x^2})y = 0$$



$$y'' + \frac{1}{x}y' + (1 - \frac{1.2^2}{x^2})y = 0$$



$$y'' + \frac{1}{x}y' + (1 - \frac{1.5^2}{x^2})y = 0$$

