Var. Sep.:

Bernoulli.: ; ; ; ; n!=1

Q2y”+Q1y’+Q0y=0 =>Q2D2y+Q1Dy+Q0y=0 =>(Q2D2+Q1D+Q0)y=0

Q2D2+Q1D+Q0=0

|  |  |
| --- | --- |
| Raizes | yH |
| D1≠D2 | k1eD1x+ k2eD2x |
| D=D1=D2 | k1eDx+ k2xeDx |
| D=α±iβ | Aeαxcos(βx+θ) |

Q2y”+Q1y’+Q0y=f(x) =>Q2D2y+Q1Dy+Q0y= f(x) =>(Q2D2+Q1D+Q0)y= f(x)

Q2D2+Q1D+Q0= f(x) =>(D-D1) (D-D2)y=f(x) =>u=(D-D2)y =>Du-D2u=f(x)

u’- D2u=f(x) ->Bernoulli-> u=(D-D2)y =>y’- D2y=u ->Bernoulli->yp=g(x)

y=yh+yp