



`DSolve[y'''[x]+y[x]==0,y,x]`



Input:

`DSolve[y(3)(x) + y(x) = 0, y, x]`

Exact result:

$\left\{ \left\{ y \rightarrow \text{Function}\left[\{x\}, e^{-x} C[1] + e^{x/2} C[3] \cos\left[\frac{\sqrt{3} x}{2} \right] + e^{x/2} C[2] \sin\left[\frac{\sqrt{3} x}{2} \right] \right] \right\} \right\}$