

```

[> restart
[> with(inttrans)
[addtable, fourier, fouriercos, fouriersin, hankel, hilbert, invfourier, invhilbert, invlaplace,
    invmellin, laplace, mellin, savetable]
[> Ecuacion := y'' - 5 y' + 6 y = 0
                                
$$Ecuacion := \frac{d^2}{dx^2} y(x) - 5 \left( \frac{d}{dx} y(x) \right) + 6 y(x) = 0$$

[> CondIni := y(0) = 2, D(y)(0) = -2
                                
$$CondIni := y(0) = 2, D(y)(0) = -2$$

[> EcuaTL := subs(CondIni, laplace(Ecuacion, x, s))
EcuaTL := s^2 laplace(y(x), x, s) + 12 - 2 s - 5 s laplace(y(x), x, s) + 6 laplace(y(x), x, s) = 0
[> SolTL := isolate(EcuaTL, laplace(y(x), x, s))
                                
$$SolTL := laplace(y(x), x, s) = \frac{2 s - 12}{s^2 - 5 s + 6}$$

[> SolPart := invlaplace(SolTL, s, x)
                                
$$SolPart := y(x) = 8 e^{2x} - 6 e^{3x}$$

[>

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