

```

> restart
> f:= 1
f:= 1
(1)

> with(inttrans)
[addtable, fourier, fouriercos, fouriersin, hankel, hilbert, invfourier, invhilbert, invlaplace,
invmellin, laplace, mellin, savetable]
(2)

> F := laplace(f, t, s)
F :=  $\frac{1}{s}$ 
(3)

> g := t
g := t
(4)

> G := laplace(g, t, s)
G :=  $\frac{1}{s^2}$ 
(5)

> gg := invlaplace(G, s, t)
gg := t
(6)

> h := x2
h :=  $x^2$ 
(7)

> H := laplace(h, x, s)
H :=  $\frac{2}{s^3}$ 
(8)

> HH := laplace(h, x, p)
HH :=  $\frac{2}{p^3}$ 
(9)

> ff := exp(a·t)
ff :=  $e^{at}$ 
(10)

> FF := laplace(ff, t, s)
FF :=  $\frac{1}{s - a}$ 
(11)

> ggg := cos(b·t)
ggg :=  $\cos(bt)$ 
(12)

> GGG := laplace(ggg, t, s)
GGG :=  $\frac{s}{b^2 + s^2}$ 
(13)

> hhh := sin(b·t)
hhh :=  $\sin(bt)$ 
(14)

> HHH := laplace(hhh, t, s)
HHH :=  $\frac{b}{b^2 + s^2}$ 
(15)

> restart
> Ecua := y'' - 5·y' + 6·y = 0
(16)

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$$Ecua := \frac{d^2}{dx^2} y(x) - 5 \left( \frac{d}{dx} y(x) \right) + 6 y(x) = 0 \quad (16)$$

$$> Cond := y(0) = 2, D(y)(0) = -3 \quad Cond := y(0) = 2, D(y)(0) = -3 \quad (17)$$

$$> SolPart := dsolve(\{Ecua, Cond\}) \quad SolPart := y(x) = 9 e^{2x} - 7 e^{3x} \quad (18)$$

> restart

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