```
> restart :
> f(t) := exp(a·t);
```

$$f(t) := e^{a\,t} \tag{1}$$

```
> with(inttrans);
```

$$[addtable, fourier, fouriercos, fouriersin, hankel, hilbert, invfourier, invhilbert, invlaplace, invmellin, laplace, mellin, savetable] \tag{2}$$

```
> F(s) := laplace(f(t), t, s);
```

$$F(s) := \frac{1}{s-a} \tag{3}$$

```
> g(t) := t··3;
```

$$g(t) := t^3 \tag{4}$$

```
> G(s) := laplace(g(t), t, s);
```

$$G(s) := \frac{6}{s^4} \tag{5}$$

```
> H(s) := (s-3)/(s··2-2·s-2);
```

$$H(s) := \frac{s-3}{s^2-2\,s-2} \tag{6}$$

```
> h(t) := convert(invlaplace(H(s), s, t), exp);
```

$$h(t) := -\frac{1}{6}\left(-3\,e^{2\,t\sqrt{3}}-3+2\sqrt{3}\,e^{2\,t\sqrt{3}}-2\sqrt{3}\right)e^{t-t\sqrt{3}} \tag{7}$$

```
>
>
>
>
```