

Shows how to use the Laplace transform in Maple and how to convert a rational function into partial fractions

```
> with(inttrans);
[addtable, fourier, fouriercos, fouriersin, hankel, hilbert, invfourier, invhilbert, invlaplace,
  invmellin, laplace, mellin, savetable] (1)
```

```
> Y := s -> 4/((s^2+1)^2*(s-1)^2);
Y:=s→ 
$$\frac{4}{(s^2+1)^2(s-1)^2}$$
 (2)
```

```
> convert(Y(s), parfrac);

$$\frac{1}{(s-1)^2} - \frac{2}{s-1} + \frac{1+2s}{s^2+1} + \frac{2s}{(s^2+1)^2}$$
 (3)
```

```
> invlaplace(Y(s), s, t);
2 cos(t) + sin(t) (1 + t) + et (-2 + t) (4)
```

```
> ?convert
```

```
> ?laplace
```

```
>
```