

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

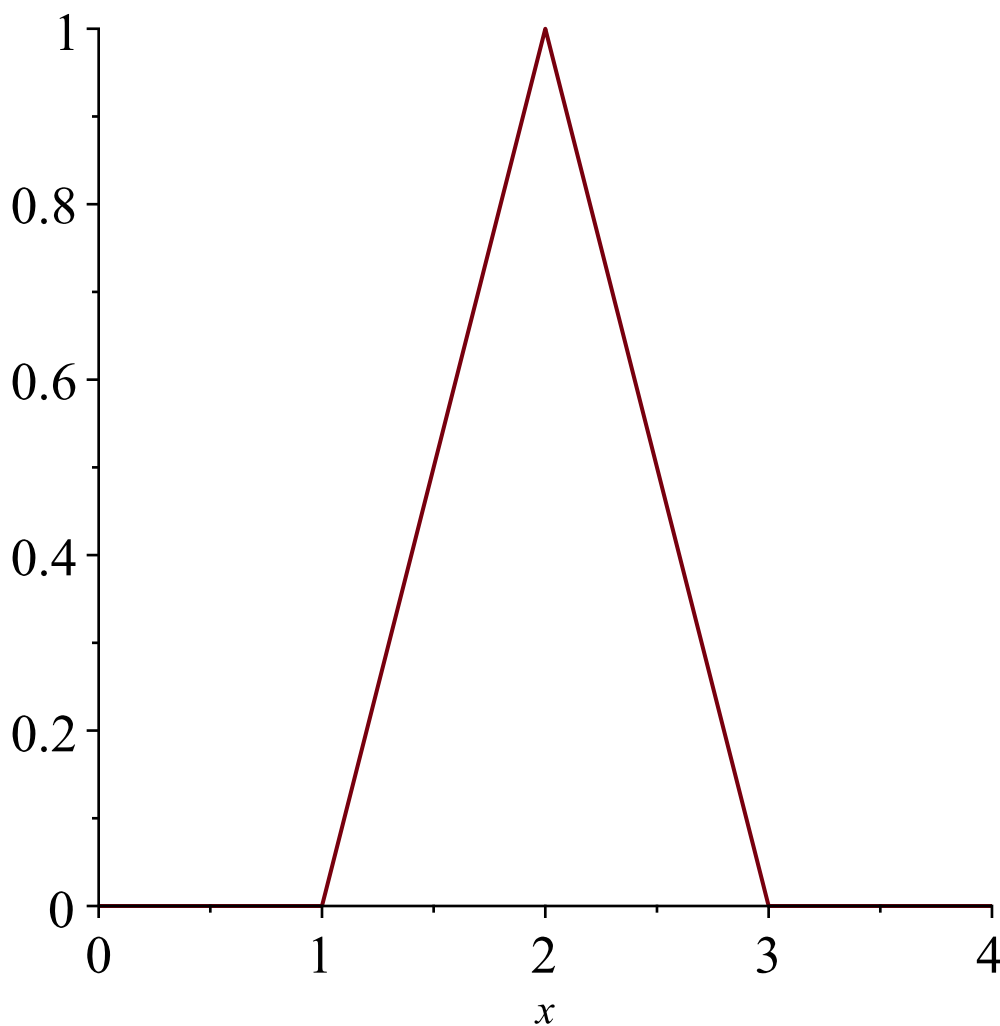
(1)

```
> u := x -> (Heaviside(x-1)-Heaviside(x-2))*(x-1)+ (Heaviside(x-2)-
  Heaviside(x-3))*(-x+3);
```

```
u := x ↦ (Heaviside(x-1) - Heaviside(x-2)) (x-1) + (Heaviside(x-2)
  - Heaviside(x-3)) (-x+3)
```

(2)

```
> plot(u(x), x=0..4);
```



```
> fourier(u(x), x, s);
```

$$\frac{4 \sin\left(\frac{s}{2}\right)^2 e^{-2Is}}{s^2}$$

(3)

```
>
```