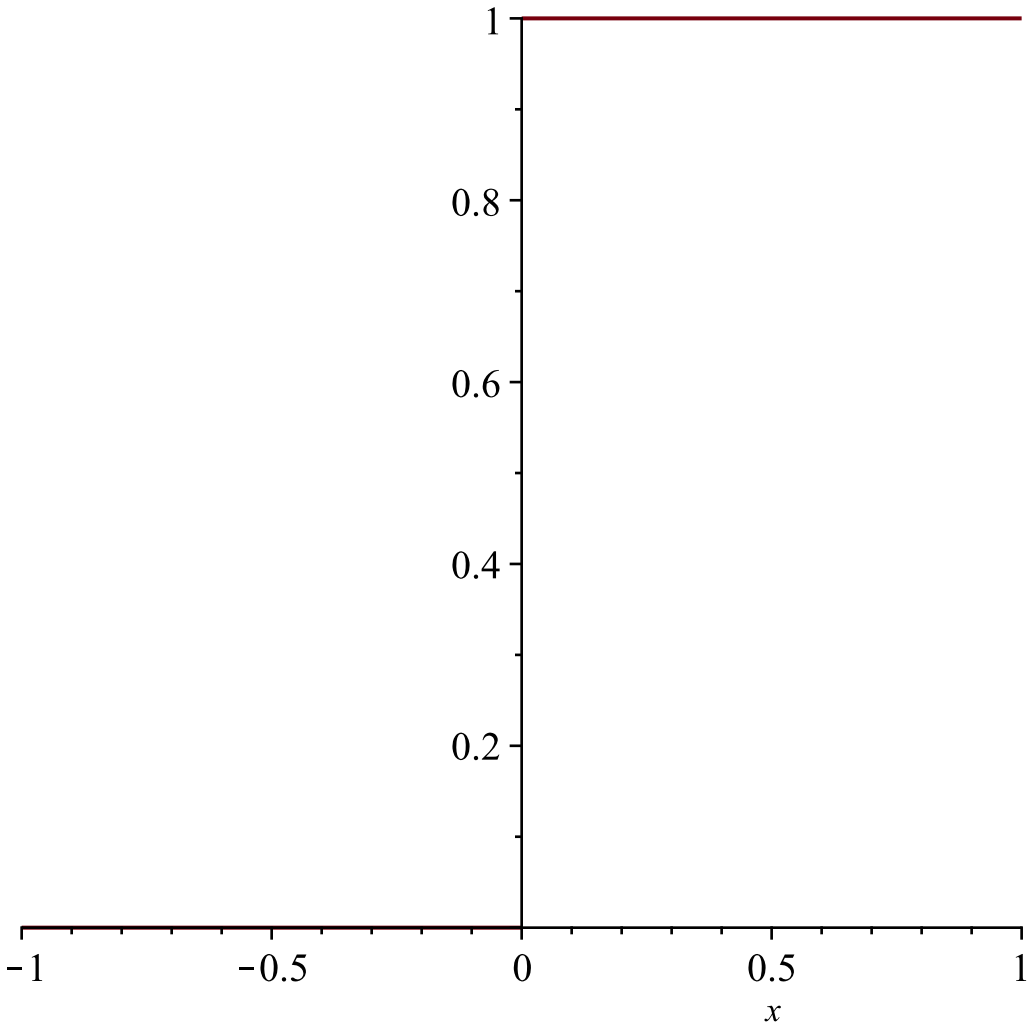
```
> u := x -> Heaviside(x);
```

$$u := x \mapsto \text{Heaviside}(x) \tag{1}$$

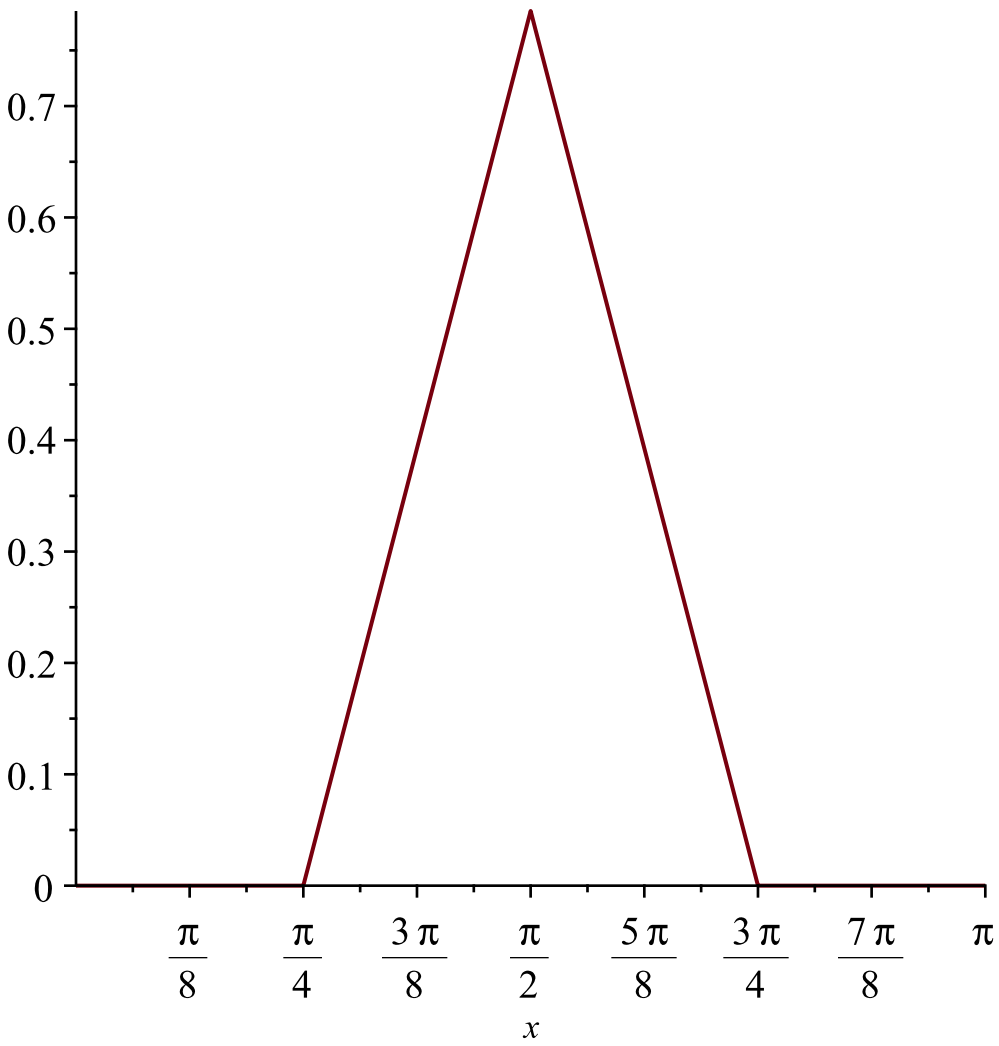
```
> plot(u(x), x=-1..1,discont=true);
```




```
> f := x-> (u(x-Pi/4)-u(x-Pi/2))*(x-Pi/4)+(u(x-Pi/2)-u(x-3*Pi/4))*
  (3*Pi/4-x);
```

$$f := x \mapsto \left(u\left(x-\frac{\pi}{4}\right)-u\left(-\frac{\pi}{2}+x\right)\right)\left(x-\frac{\pi}{4}\right)+\left(u\left(-\frac{\pi}{2}+x\right)-u\left(x-\frac{3\,\pi}{4}\right)\right)\left(\frac{3\,\pi}{4}-x\right) \tag{2}$$

```
> plot(f(x),x=0..Pi);
```



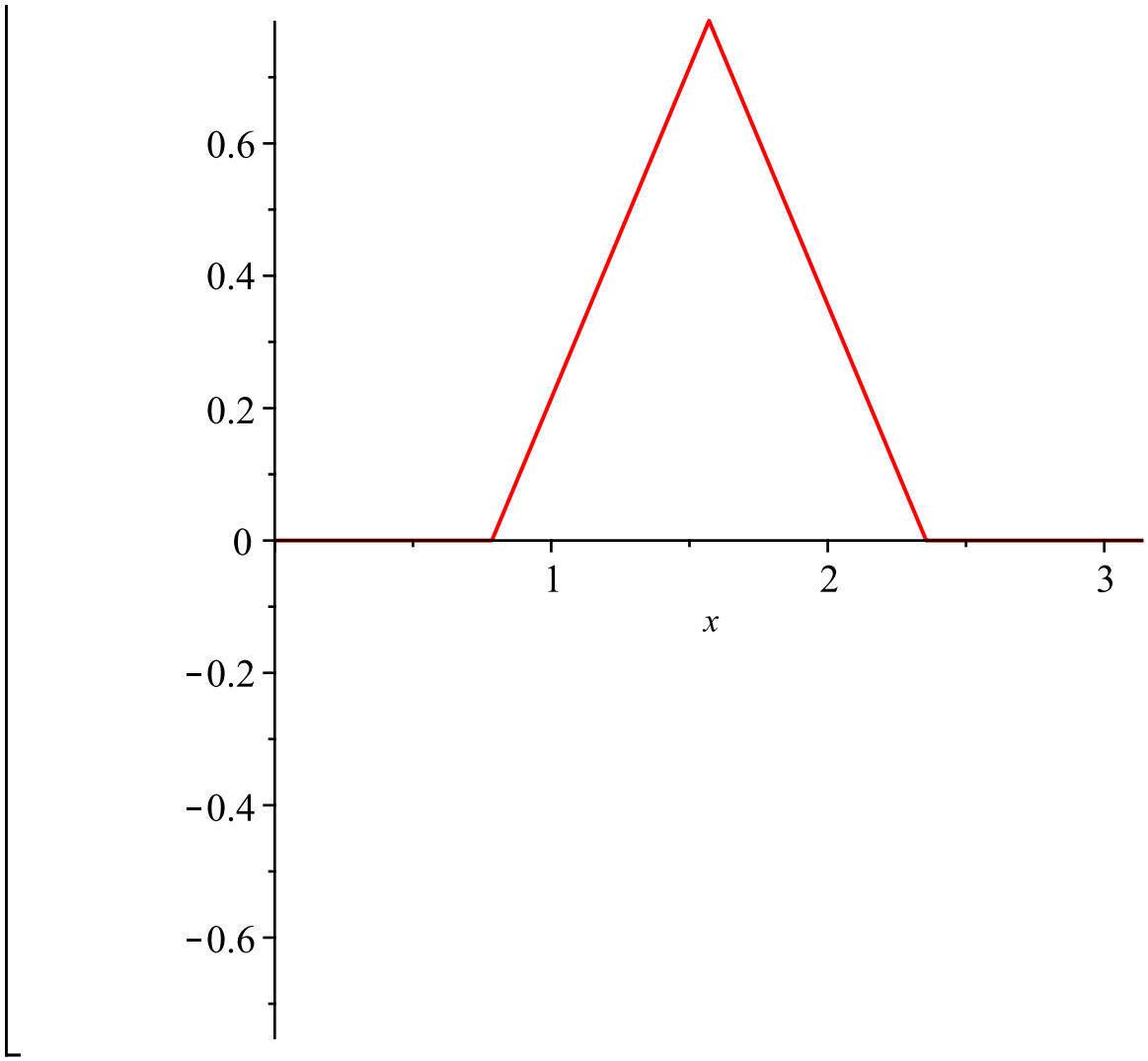

```
> F := x -> f(x)-f(-x);
```

$$F := x \mapsto f(x) - f(-x) \tag{3}$$

```
> g := x-> F(x+2*Pi)+F(x)+F(x-2*Pi);
```

$$g := x \mapsto F(x + 2\,\pi) + F(x) + F(x - 2\,\pi) \tag{4}$$

```
> with(plots):
> animate((1/2)*(g(x+t)+g(x-t)),x=0..Pi, t=0..2*Pi,frames=100);
```


0.6
0.4
0.2
0
-0.2
-0.4
-0.6
1
2
3
x