

```
f[x_] := Which[-∞ < x < -π/2, 0, -π/2 < x < π/2, 1, π/2 < x < ∞, 0];
```

```
√(2 * Pi) * FourierTransform[f[x], x, w]
```

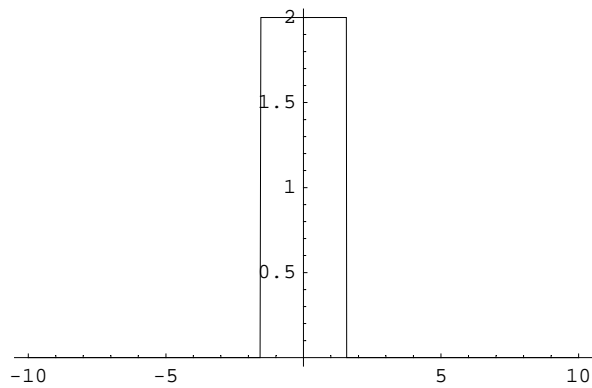
$$\frac{2 \operatorname{Sin}\left[\frac{\pi w}{2}\right]}{w}$$

```
g[t_] := (2 * Sin[π*t/2]) / t;
```

```
√(2 * Pi) * FourierTransform[g[t], t, w] // FullSimplify
```

$$\pi \left( \operatorname{Sign}[\pi - 2w] + \operatorname{Sign}\left[\frac{\pi}{2} + w\right] \right)$$

```
Plot[(Sign[π - 2w] + Sign[π/2 + w]), {w, -10, 10}]
```



- Graphics -