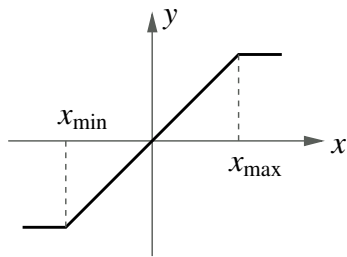


# limiter.xbe

## Attributes

```
xbe name=limiter evaluate=yes
Jacobian: variable
input_vars: x
output_vars: y
aux_vars:
iparms:
sparms:
rparms: xmin=-1 xmax=1
stparms:
igparms:
outparms: x y
```

## Description



`limiter.xbe` limits the value of the output variable  $y$  if the input variable  $x$  is outside a certain range. Specifically,

$$\begin{aligned} y &= x_{\min} && \text{if } x < x_{\min}, \\ &= x_{\max} && \text{if } x > x_{\max}, \\ &= x && \text{otherwise.} \end{aligned}$$

The input-output relation is shown in the figure. Note that there are no restrictions on  $x_{\min}$  and  $x_{\max}$  except  $x_{\min} < x_{\max}$ .