

## pwl10\_xy.xbe

### Attributes

```
xbe name=pwl10_xy evaluate=yes
# y vs x described in a piecewise linear form
Jacobian: variable
input_vars: x
output_vars: y
aux_vars:
iparms: n=2
sparms:
rparms:
+ x1=1 x2=1 x3=1 x4=1 x5=1
+ x6=1 x7=1 x8=1 x9=1 x10=1
+ y1=1 y2=1 y3=1 y4=1 y5=1
+ y6=1 y7=1 y8=1 y9=1 y10=1
stparms:
igparms:
outparms: x y
```

### Description

`pwl10_xy.xbe` is used to generate a piecewise linear function  $y(x)$  up to 10 “break points.” The parameters have the following meaning:

**n:** Number of break points.

**x1, x2, etc.:**  $x$  value of break point 1, 2, etc.

**y1, y2, etc.:** value of  $y$  at the corresponding break point.  $y$  is made constant (equal to  $y1$ ) for  $x < x_1$ . Also,  $y$  is made constant after the  $n^{\text{th}}$  break point.

An example with  $n = 3$  is shown below.

