sop_4_6.xbe

Attributes

```
xbe name=sop_4_6 evaluate=yes allow_elex=yes
Jacobian: variable
input_vars: x1 x2 x3 x4
output_vars: y
aux_vars:
iparms:
+  k11=0  k12=0  k13=0  k14=0
+  k21=0  k22=0  k23=0  k24=0
+  k31=0  k32=0  k33=0  k34=0
+  k41=0  k42=0  k43=0  k44=0
+  k51=0  k52=0  k53=0  k54=0
+  k61=0  k62=0  k63=0  k64=0
sparms:
rparms:
+  k1=0  k2=0  k3=0  k4=0  k5=0  k6=0
+  k0=0
stparms:
igparms:
outparms: x1 x2 x3 x4 y
```

Description

sop_4_6.xbe is used to get a sum-of-products expression for output y in terms of inputs x1, x2, x3, x4.
y is given by

$$y = k_0 + k_1 p_1 + k_2 p_2 + k_3 p_3 + k_4 p_4 + k_5 p_5 + k_6 p_6, \tag{1}$$

where p_j is x_1, x_2, x_3, x_4, $x_1 x_2$, $x_1 x_3$, $x_2 x_3$, etc., depending on the integer parameters k_{j1}, k_{j2}, k_{j3}, k_{j4}. For example, if $k_{11} = 0$, $k_{12} = 1$, $k_{13} = 1$, $k_{14} = 1$, then $p_1 = x_2 x_3 x_4$.

x1, x2, x3, x4, y are made available as output variables.