

## user\_fn\_4\_3.xbe

### Attributes

```
xbe name=user_fn_4_3 evaluate=yes
Jacobian: constant
input_vars: x1 x2 x3 x4
output_vars: y1 y2 y3
aux_vars:
iparms:
+ iprm1=0
+ iprm2=0
+ index_fn=1
sparms:
rparms:
+ rprm1=0
+ rprm2=0
+ rprm3=0
+ rprm4=0
+ rprm5=0
+ rprm6=0
+ rprm7=0
+ rprm8=0
+ rprm9=0
+ rprm10=0
stparms:
igparms:
outparms: y1 y2 y3
```

### Description

`user_fn_m.n.xbe` provides a facility for the user to create a new function with `m` inputs and `n` outputs. Up to two integer parameters (`iprm1` and `iprm2`) and up to ten real parameters (`rprm1` to `rprm10`) can be used. The integer parameter `index_fn` is passed on to the routine `user_function` as `index_fn`. This parameter determines which function in `user_f.cpp` corresponds to the element in question.

To define a new function, the following steps need to be performed;

1. Edit `user_f.cpp` (located in the directory `~/gseim_gui/gseim/cppsrc` to include the new function.
2. Execute the compile/link steps given in the installation instructions.