$$a1 \;:=\; 0 \tag{1}$$

$$\begin{aligned} a2 \;&:=\; x \\ &\text{where } (x) \;=\; (0) \end{aligned} \tag{2}$$

$$\begin{aligned} a3 \;&:=\; y \\ &\text{where } ((x) = (0)) \wedge ((y) = (x)) \end{aligned} \tag{3}$$

$$f1\,(x) \;:=\; \begin{cases} 1 & \text{if } (x) > (0) \end{cases} \tag{4}$$

$$f2\,(x) \;:=\; \begin{cases} 1 & \text{if } (x) > (0) \\ 0 & \text{if } (x) = (0) \end{cases} \tag{5}$$

$$f3\,(x) \;:=\; \begin{cases} 1 & \text{if } (x) > (0) \\ 0 & \text{if } (x) = (0) \\ -1 & \text{otherwise} \end{cases} \tag{6}$$

$$c1 \;:=\; f1\,(1) \tag{7}$$

$$c2 \;:=\; f2\,(0) \tag{8}$$

$$c3 \;:=\; f3\,(-1) \tag{9}$$

$$f\left(x,y\right)\ :=\ \begin{cases} z1 & \text{if } (x) > (y) \\ z2 & \text{if } (x) = (y) \\ z3 & \text{otherwise} \end{cases} \tag{10}$$
$$\text{where } (((z1) = ((x) - (y))) \wedge ((z2) = (z1))) \wedge ((z3) = (z2))$$

$$d1\ :=\ f\left(1,0\right) \tag{11}$$

$$d2\ :=\ f\left(0,0\right) \tag{12}$$

$$d3\ :=\ f\left(-1,0\right) \tag{13}$$

$$\begin{aligned} r\left(x,y,z\right)\ &\equiv\ (t)\ = (0) \\ \text{where } (t)\ &= (((x) \times (y)) \times (z)) \end{aligned} \tag{14}$$

$$e\ :=\ r\left(-1,0,1\right) \tag{15}$$

test:

```
cmd:>pp(a1)
"0"
cmd:>pp(a2)
"0"
cmd:>pp(a3)
"0"
cmd:>pp(c1)
"1"
cmd:>pp(c2)
"0"
cmd:>pp(c3)
"-1"
cmd:>pp(d1)
```

```
"1"
cmd:>pp(d2)
"0"
cmd:>pp(d3)
"-1"
cmd:>pp(e)
"true"
```