```
\begin{split} f_1 &= 1 + x_4 + x_3 + x_2 + x_2 x_3 x_4 + x_1 \\ f_2 &= 1 + x_3 x_4 + x_2 + x_1 x_4 + x_1 x_3 + x_1 x_3 x_4 + x_1 x_2 x_3 \\ f_3 &= 1 + x_3 + x_2 + x_1 x_4 + x_1 x_2 + x_1 x_2 x_4 \\ f_4 &= x_4 + x_3 x_4 + x_2 + x_2 x_3 + x_2 x_3 x_4 + x_1 + x_1 x_4 + x_1 x_2 + x_1 x_2 x_4 \end{split}
```