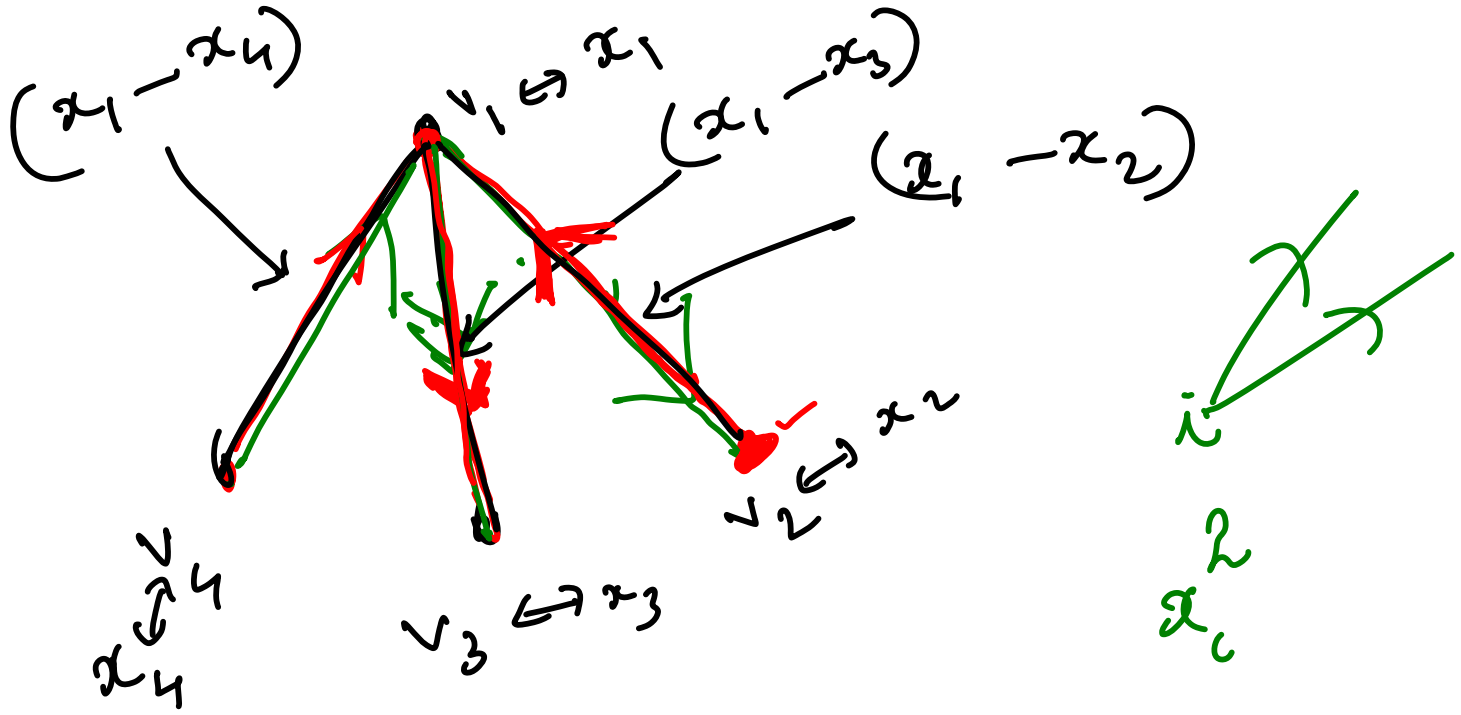
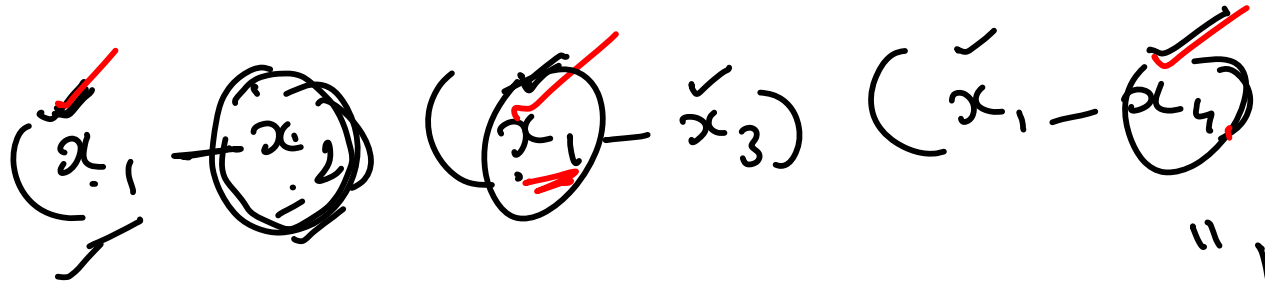


$$A(G, x) = (x_1 - x_2)(x_1 - x_3)(x_1 - x_4)$$



$= x_1^3 - x_1^2 x_4 - x_1^2 x_3 +$

$+ x_2 x_1 x_4$

"m" is the # of edges then 2^m terms

$$f(x_1, x_2, x_3, \ldots x_n) =$$

$$f_0(x_1, x_2, \ldots x_{n-1})\, x_n^0 + f_1(x_1, \ldots x_{n-1})\, x_n^1 +$$

$$+ f_2(x_1, \ldots x_{n-1})\, x_n^2 + \cdots + f_{d_n}(x_1 \ldots x_{n-1})\, x_n^{d_n}$$

$(d_{n+1}) \rightarrow$

f

$$f_i = \prod_{t \in L_i} (x_i - t)$$

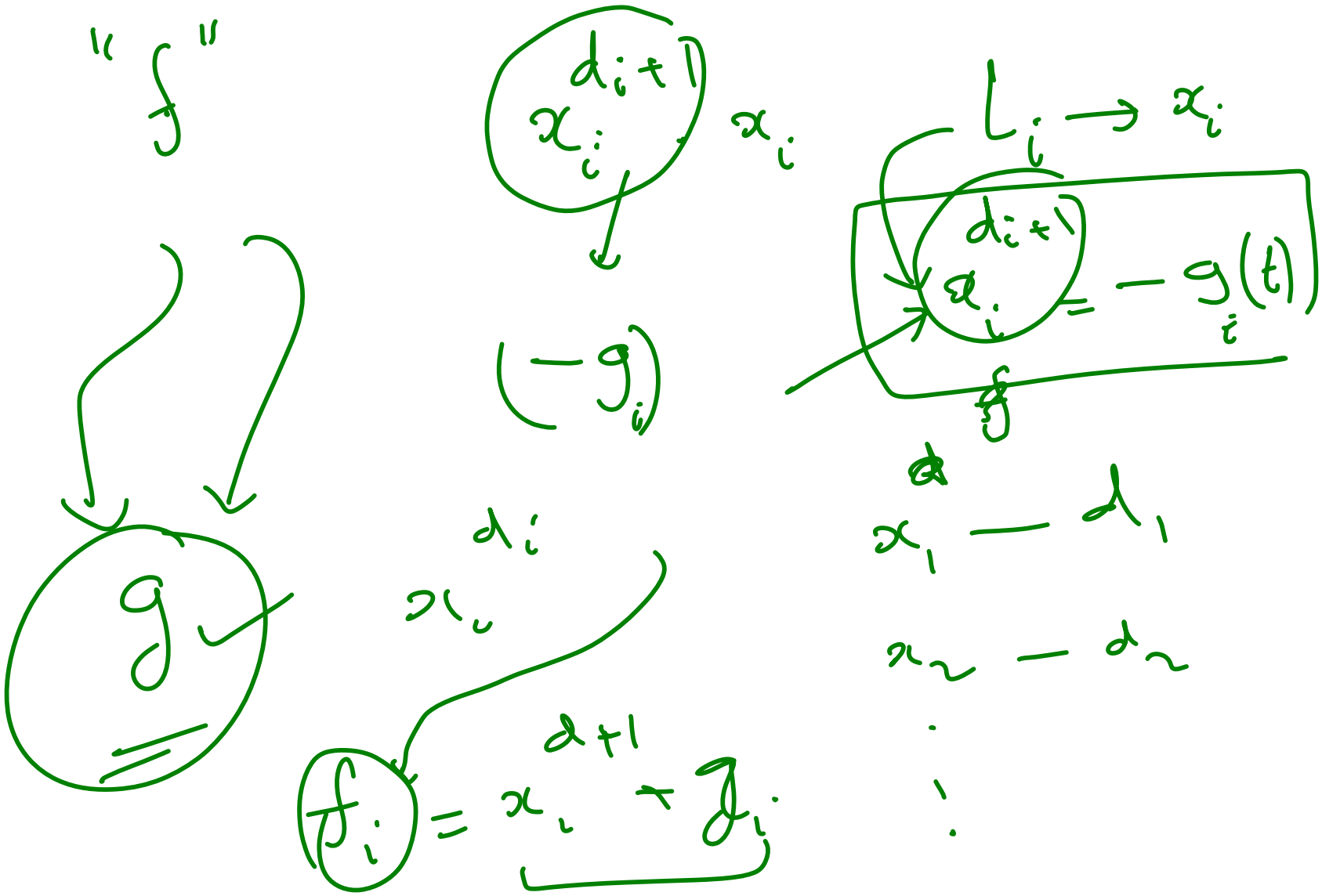
$|L_i| = d_i + 1$

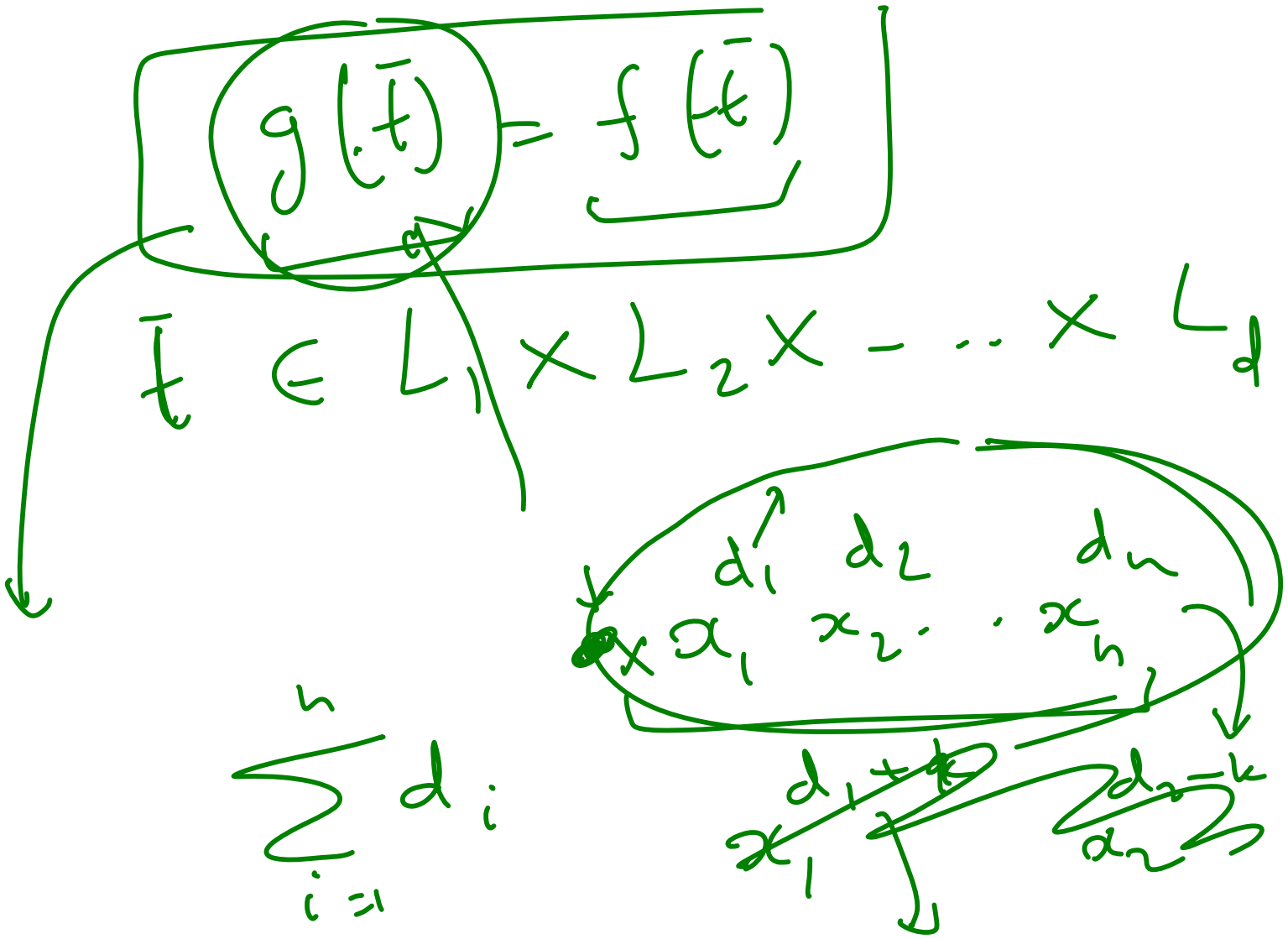
$t \in L_i$

$f_i(t) = 0$

$$f_i = x_i^{d_i+1} + g_i$$

$$x^{d_i+1} = -g_i$$


"f"
$x_i^{d_i+1}$
x_i
$(-g_i)$
$L_i \to x_i$
$x_i^{d_i+1} = -g_i(t)$
$x_1 - d_1$
$x_2 - d_2$
$x_i^{d_i}$
$f_i = x_i^{d+1} - g_i$



$$\boxed{g(\bar{t}) = f(\bar{t})}$$

$$\bar{t} \in L_1 \times L_2 \times \dots \times L_d$$

$$x_1^{d_1} x_2^{d_2} \cdots x_n^{d_n}$$

$$\sum_{i=1}^{n} d_i$$

$$x_1^{d_1+k} \quad x_2^{d_2-k}$$