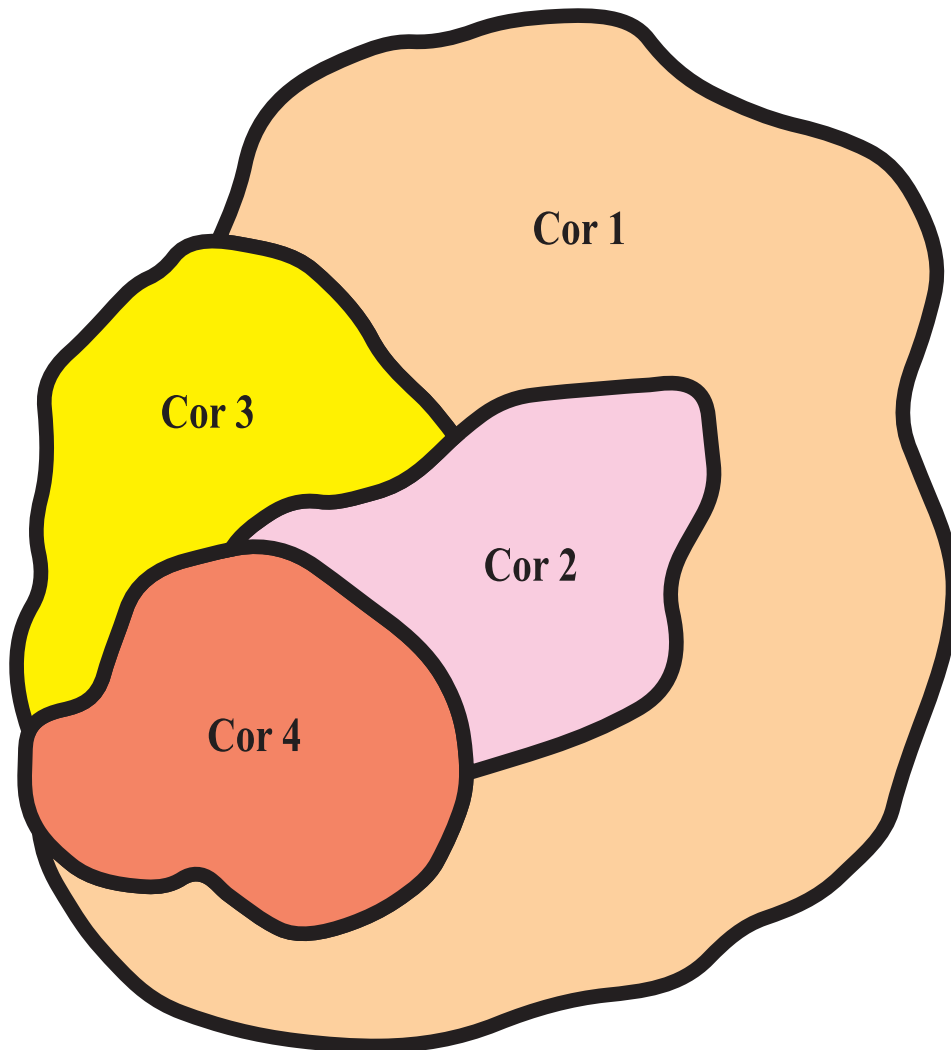




# Polinômios Coloridos

$$P(x, v) = x^k + n_1x^{k-1} + n_2x^{k-2} + \dots + n_{k-1}x$$



**PCoins**

## Colorful Coins



# 3.0 Aplicação do Operador Autodestrutivo R\*

$$R^* f(x) \text{ —> } f(x \oplus R^*)$$

Operador

$$R^* R^* = 0 \quad | \quad R^* N = N$$

Operações



$$R^* x \text{ —> } (x \oplus R^*)$$

$$R^* x \text{ —> } x \oplus R^* 1$$

$$R^* x^2 \text{ —> } (x \oplus R^*)^2$$

$$R^* x^2 \text{ —> } x^2 \oplus R^* 2x \oplus \cancel{R^* R^*}^0$$

$$R^* x^2 \text{ —> } x^2 \oplus R^* 2x$$

$$R^* x^2 \text{ —> } x^2 \oplus 2(x \oplus R^*)$$

$$R^* x^2 \text{ —> } x^2 \oplus 2x \oplus R^* 2$$

$$R^* x^3 \text{ —> } (x \oplus R^*)^3$$

$$R^* x^3 \text{ —> } x^3 \oplus R^* 3x^2 \oplus \cancel{R^* R^*}^0 3x \oplus \cancel{R^* R^* R^*}^0$$

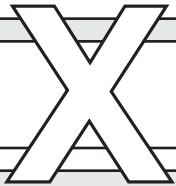
$$R^* x^3 \text{ —> } x^3 \oplus R^* 3x^2$$

$$R^* x^3 \text{ —> } x^3 \oplus 3(x \oplus R^*)^2$$

$$R^* x^3 \text{ —> } x^3 \oplus 3x^2 \oplus R^* 6x \oplus \cancel{R^* R^*}^0 3$$

$$R^* x^3 \text{ —> } x^3 \oplus 3x^2 \oplus 6(x \oplus R^*)$$

$$R^* x^3 \text{ —> } x^3 \oplus 3x^2 \oplus 6x \oplus R^* 6$$



$$P(X, V) = x^v \oplus ax^{v-1} \oplus bx^{v-2} \oplus cx^{v-3} \oplus \dots$$

Polinômio Cromo-Combinatório

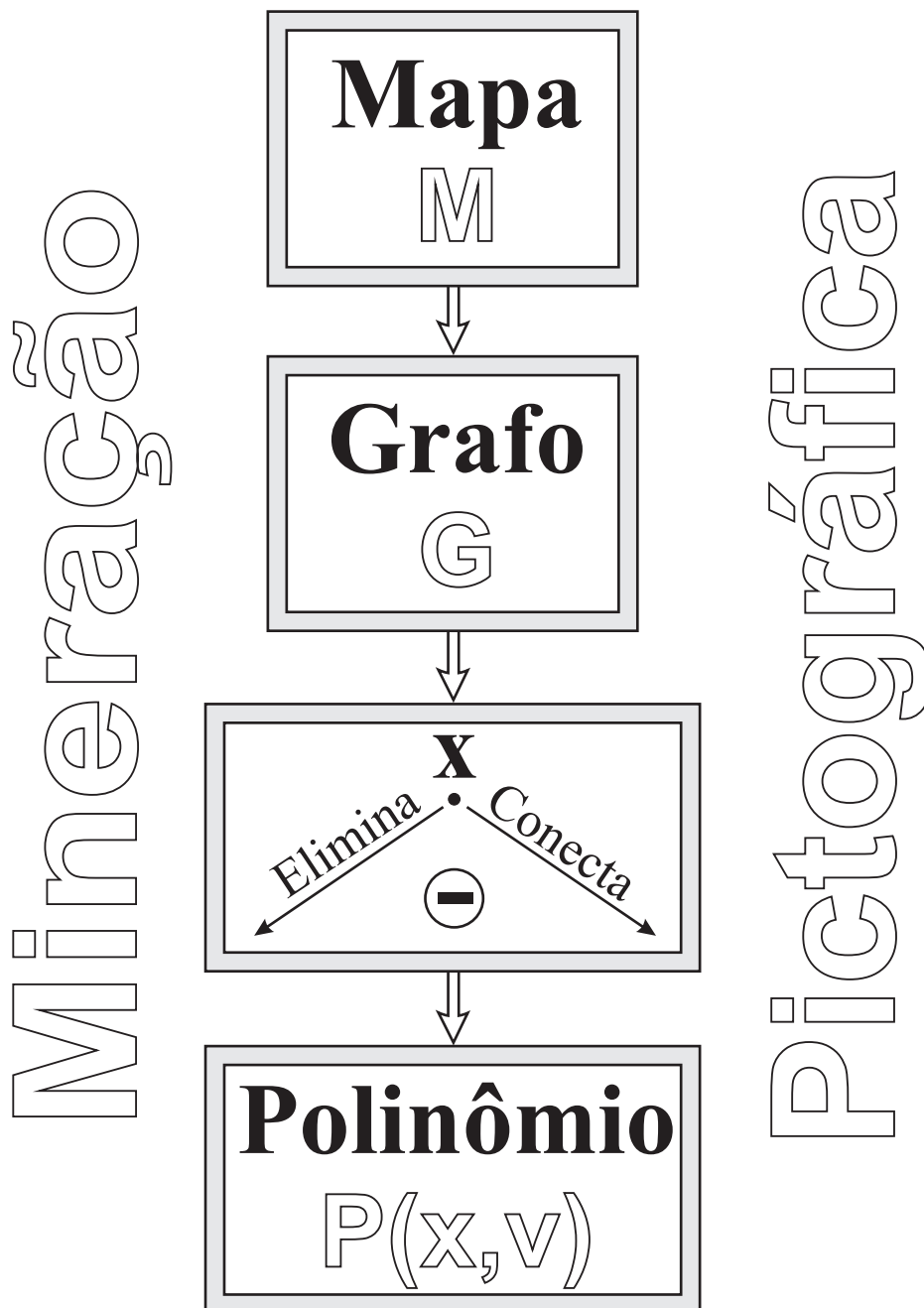


# 7.0 Cálculo Fracionário CromoPolinomial

## Poligólise

*Polýs* (muito) + *nomós* (partes) + *lýsis* (decompor).

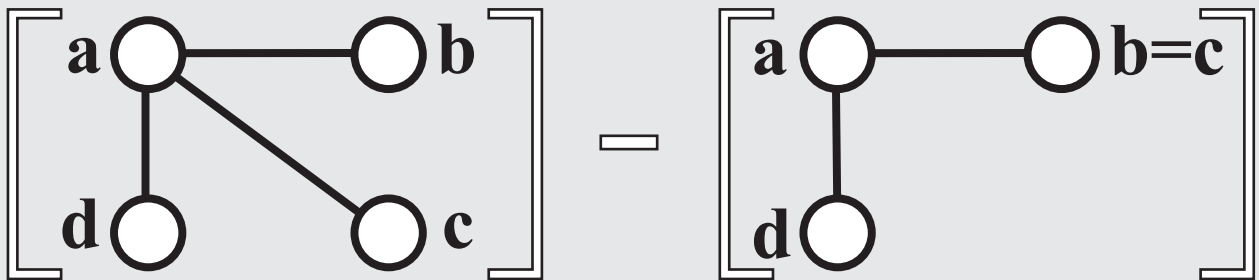
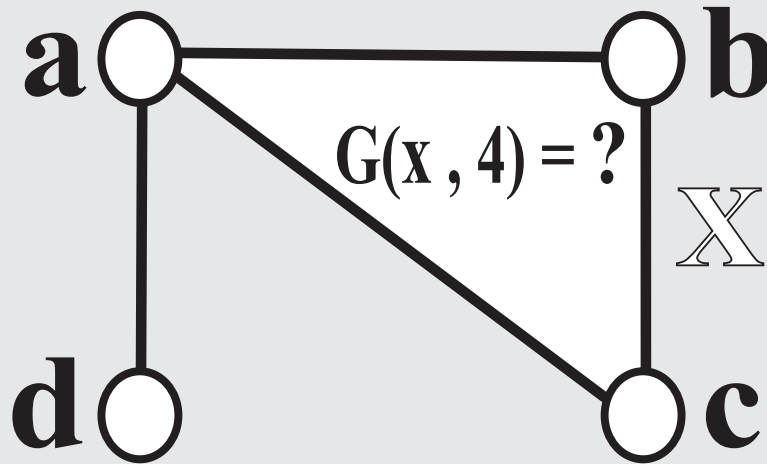
Dado um grafo originado de um mapa, formatado com os blocos A, B, C, ... segue o algoritmo que permite aos mineradores decompô-los em polinômios cromo-valências:



# Poligólise CromoComputacional de PCoins



# 7.3 Cálculo Fracionário do Polinômio $G(X, 4)$



$$\left[ x^4 - 3x^3 + 3x^2 - x \right] - \left[ x^3 - 2x^2 + x \right]$$

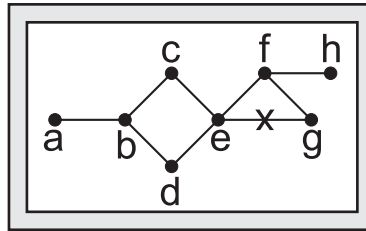
$$\left\{ x^4 - 4x^3 + 5x^2 - 2x \right\}$$

$$G(X, 4) = C(X, 4) - C(X, 3)$$

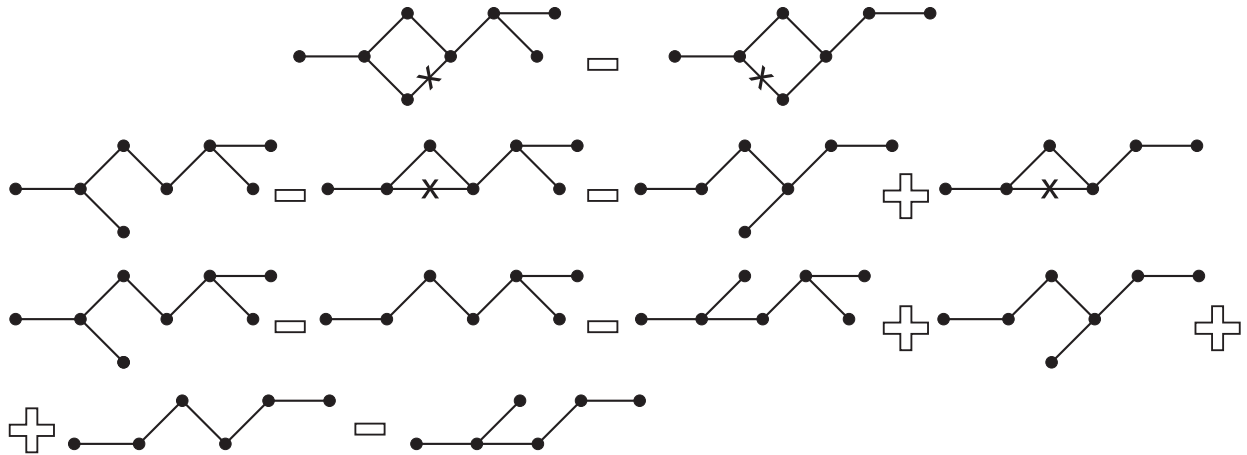
Mineração/Poligólise do Mapa  $G(X, 4)$



# 10.3 Mineração do Bloco Tertium M(X, 8)

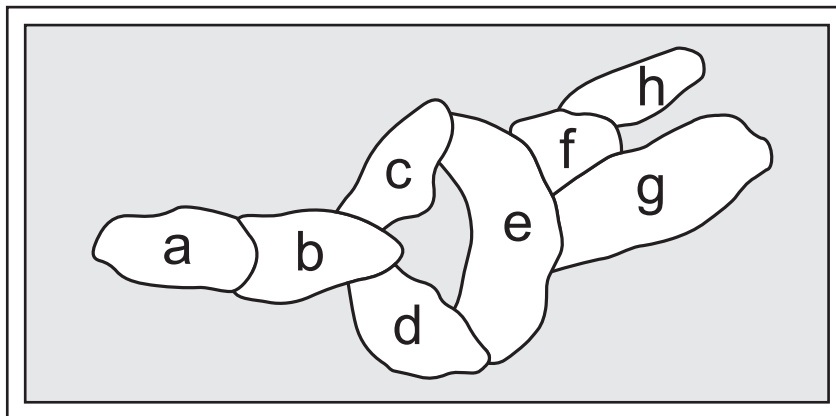


Grafo



$$M(x,8) = C(x,8) - C(x,7) + C(x,7) - C(x,7) + C(x,6) - C(x,5)$$

$$M(x,8) = x \cdot (x - 1)^4 \cdot [x^3 - 4x^2 + 6x - 4]$$



Mapa dos Estados

$$x = 1 \Rightarrow M = 0$$

$$x = 2 \Rightarrow M = 0$$

$$x = 3 \Rightarrow M = 240$$

Block **M(x,8)** Chain