



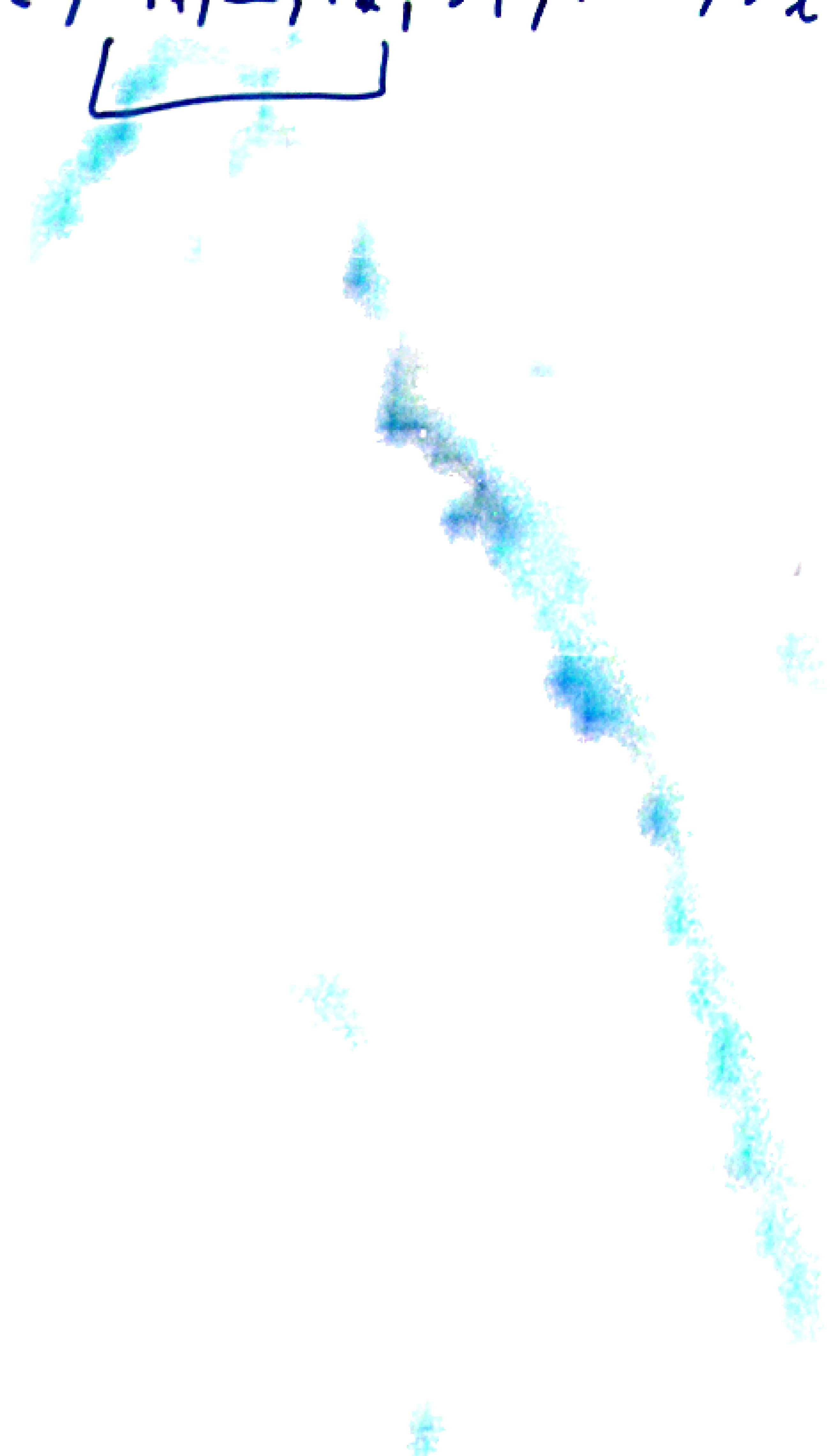






$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{\text{r}_1, \dots, \text{r}_k}, s_1, \dots, s_\ell \right\}$$

$$K = 1 + \max \{ r_1, \dots, r_k, s_1, \dots, s_\ell \}$$



$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{\text{r}_1, \dots, r_k}, s_1, \dots, s_\ell \right\}$$

$p(x)$  se equivale a  $q(x) \rightarrow$

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{\text{r}}, s_1, \dots, s_\ell \right\}$$

$p(x)$  es equivalente a  $q(x)$   $\rightarrow$  Sí ✓

$p(x)$  no es equivalente a  $q(x)$   $\rightarrow$   $\Pr(p(a) = q(a))$

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{\text{r}_1, \dots, r_k}, s_1, \dots, s_\ell \right\}$$

$p(x)$  es equivalente a  $q(x)$   $\rightarrow$  si ✓

$p(x)$  no es equivalente a  $q(x)$   $\rightarrow$   $\Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$

$$r(x) = p(x) - q(x)$$

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{\text{r}_1, \dots, r_k}, s_1, \dots, s_\ell \right\}$$

$p(x)$  es equivalente a  $q(x)$   $\rightarrow$  si ✓

$p(x)$  no es equivalente a  $q(x)$   $\rightarrow$   $\Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$

$$r(x) = p(x) - q(x)$$

$$= \frac{\text{_____}}{100K}$$

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{\text{r}_1, \dots, r_k}, s_1, \dots, s_\ell \right\}$$

$p(x)$  es equivalente a  $q(x)$   $\rightarrow$  si ✓

$p(x)$  no es equivalente a  $q(x)$   $\rightarrow$   $\Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$

$$r(x) = p(x) - q(x)$$

$$= \frac{\text{_____}}{100K}$$

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{\text{r}_1, \dots, r_k}, s_1, \dots, s_\ell \right\}$$

$p(x)$  es equivalente a  $q(x)$   $\rightarrow$  si ✓

$p(x)$  no es equivalente a  $q(x)$   $\rightarrow$   $\Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$

$$r(x) = p(x) - q(x)$$

$$\leq \frac{K}{100K} = \frac{1}{100}$$

$$K = 1 + \max \{ r_1, \dots, r_k, s_1, \dots, s_\ell \}$$

$p(x)$  es equivalente a  $q(x)$   $\rightarrow$  si ✓

$p(x)$  no es equivalente a  $q(x)$   $\rightarrow$   $\Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$

$$r(x) = p(x) - q(x)$$

$$\leq \frac{K}{100K} = \frac{1}{100}$$

$$K = 1 + \max \{ r_1, \dots, r_k, s_1, \dots, s_l \}$$

$p(x)$  es equivalente a  $q(x)$   $\rightarrow$  si ✓

$p(x)$  no es equivalente a  $q(x)$   $\rightarrow$   $\Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$

$$r(x) = p(x) - q(x)$$

$$\{ 1, \dots, 100^k K \}$$

$$\frac{1}{100^k} = \frac{1}{10^{20}}$$

$$\leq \frac{K}{100K}$$

$$\frac{1}{100}$$

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{\text{r}_1, \dots, r_k}, s_1, \dots, s_\ell \right\}$$

$$\frac{1}{100^{10}} = \frac{1}{10^{20}}$$

$p(x)$  es equivalente a  $q(x)$  → si ✓

$$p(x) \text{ no es equivalente a } q(x) \rightarrow \Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$$

$$r(x) = p(x) - q(x)$$

$$\{1, \dots, 100^{10} K\}$$

$$\leq \frac{K}{100K}$$

$$\frac{1}{100}$$

$$K = 1 + \max \{ r_1, \dots, r_k, s_1, \dots, s_l \}$$

$$\frac{1}{100^{10}} = \frac{1}{10^{20}}$$

$p(x)$  es equivalente a  $q(x)$  → si ✓

$p(x)$  no es equivalente a  $q(x)$  →  $\Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$

$$r(x) = p(x) - q(x)$$

$$\{1, \dots, 100^{10} K\}$$

$$\binom{36}{6}$$

$$\leq \frac{K}{100K}$$

$$\frac{1}{100}$$

$$K = 1 + \max \{ r_1, \dots, r_k, s_1, \dots, s_\ell \}$$

$$\frac{1}{100^{10}} = \frac{1}{10^{20}}$$

$p(x)$  es equivalente a  $q(x)$  → si ✓

$p(x)$  no es equivalente a  $q(x)$  →  $\Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$

$$r(x) = p(x) - q(x)$$

$$\left\{ 1, \dots, 100^{10} K \right\} \binom{36}{6}$$

$$\leq \frac{K}{100K} = \frac{1}{100}$$

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{\text{r}_1, \dots, r_k}, s_1, \dots, s_\ell \right\}$$

$$\frac{1}{100^{10}} = \frac{1}{10^{20}}$$

$p(x)$  es equivalente a  $q(x)$  → si ✓

$p(x)$  no es equivalente a  $q(x)$  →  $\Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$

$$r(x) = p(x) - q(x)$$

$$\left\{ 1, \dots, 100^{10} K \right\} \binom{36}{6}$$

$$\leq \frac{K}{100K} = \frac{1}{100}$$

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{\text{r}_1, \dots, r_k}, s_1, \dots, s_\ell \right\}$$

$$\frac{1}{100^{10}} = \frac{1}{10^{20}}$$

$p(x)$  es equivalente a  $q(x)$  → si ✓

$$p(x) \text{ no es equivalente a } q(x) \rightarrow \Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$$

$$r(x) = p(x) - q(x)$$

$$\left\{ 1, \dots, 100^{\text{10}} K \right\} \binom{36}{6}$$

$$\leq \frac{K}{100K} = \frac{1}{100}$$

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{\text{r}_1, \dots, r_k}, s_1, \dots, s_\ell \right\}$$

$$\frac{1}{100^{10}} = \frac{1}{10^{20}}$$

$p(x)$  es equivalente a  $q(x)$  → si ✓

$$p(x) \text{ no es equivalente a } q(x) \rightarrow \Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$$

$$r(x) = p(x) - q(x)$$

$$\left\{ 1, \dots, 100^{10} K \right\} \binom{3^6}{6}$$

$$\leq \frac{K}{100K} = \frac{1}{100}$$

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{\text{r}_1, \dots, r_k}, s_1, \dots, s_\ell \right\}$$

$$\frac{1}{100^{10}} = \frac{1}{10^{20}}$$

$p(x)$  es equivalente a  $q(x)$  → si ✓

$$p(x) \text{ no es equivalente a } q(x) \rightarrow \Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$$

$$r(x) = p(x) - q(x)$$

$$\left\{ 1, \dots, 100^{10} K \right\} \binom{3^6}{6}$$

$$\leq \frac{K}{100K} = \frac{1}{100}$$

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{}, s_1, \dots, s_\ell \right\}$$

$$\frac{1}{100^{10}} = \frac{1}{10^{20}}$$

$p(x)$  es equivalente a  $q(x)$  → si ✓

$p(x)$  no es equivalente a  $q(x)$  →  $\Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$

$$r(x) = p(x) - q(x)$$

$$5 \cdot x_1^2 \cdot x_2^1 x_3^0 \rightarrow \dots \leq \frac{K}{100K} = \frac{1}{100}$$

6,

...

x

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{}, s_1, \dots, s_\ell \right\}$$

$$\frac{1}{100^{10}} = \frac{1}{10^{20}}$$

$p(x)$  es equivalente a  $q(x)$  → si ✓

$$p(x) \text{ no es equivalente a } q(x) \rightarrow \Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$$

$$r(x) = p(x) - q(x)$$

$$5 \cdot x_1^2 \cdot x_2^1 x_3^0 \rightarrow 3 \leq \frac{K}{100K} = \frac{1}{100}$$

$$\left( \frac{2}{3} \cdot x_1 + \frac{3}{4} x_2 + 7 \right) \left( 0 \cdot x_1 + 5 x_2 - 3 \right) + ( ) ( )$$

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{}, s_1, \dots, s_l \right\}$$

$$\frac{1}{100^{10}} = \frac{1}{10^{20}}$$

$p(x)$  es equivalente a  $q(x)$  → si ✓

$$p(x) \text{ no es equivalente a } q(x) \rightarrow \Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$$

$$r(x) = p(x) - q(x)$$

$$5 \cdot x_1^2 \cdot x_2^1 x_3^0 \rightarrow 3 \leq \frac{K}{100K} = \frac{1}{100}$$

$$\left( \frac{2}{3} \cdot x_1 + \frac{3}{4} x_2 + 7 \right) \left( 0 \cdot x_1 + 5x_2 - 3 \right) + ( ) ( )$$

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{}, s_1, \dots, s_\ell \right\}$$

$$\frac{1}{100^{10}} = \frac{1}{10^{20}}$$

$p(x)$  es equivalente a  $q(x)$  → si ✓

$p(x)$  no es equivalente a  $q(x)$  →  $\Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$

$$r(x) = p(x) - q(x)$$

$$5 \cdot x_1^2 \cdot x_2^1 x_3^0 \rightarrow 3 \leq \frac{K}{100K} = \frac{1}{100}$$

$$\left( \frac{2}{3} \cdot x_1 + \frac{3}{4} x_2 + 7 \right) (0 \cdot x_1 + 5x_2 - 3) + ( ) ( )$$

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{}, s_1, \dots, s_\ell \right\}$$

$$\frac{1}{100^{10}} = \frac{1}{10^{20}}$$

$p(x)$  es equivalente a  $q(x)$  → si ✓

$$p(x) \text{ no es equivalente a } q(x) \rightarrow \Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$$

$$r(x) = p(x) - q(x)$$

$$5 \cdot x_1^2 \cdot x_2^1 x_3^0 \rightarrow 3 \leq \frac{K}{100K} = \frac{1}{100}$$

$$\left( \frac{2}{3} \cdot x_1 + \frac{3}{4} x_2 + 7 \right) \left( 0 \cdot x_1 + 5x_2 - 3 \right) + ( ) ( )$$

$$K = 1 + \max \{ \underbrace{r_1, \dots, r_k}_{\text{r}_1, \dots, r_k}, s_1, \dots, s_\ell \}$$

$$\frac{1}{100^{10}} = \frac{1}{10^{20}}$$

$p(x)$  es equivalente a  $q(x)$   $\rightarrow$  si ✓

$p(x)$  no es equivalente a  $q(x)$   $\rightarrow$   $\Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$

$$r(x) = p(x) - q(x)$$

- ..? ..?

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{}, s_1, \dots, s_\ell \right\}$$

$$\frac{1}{100^{10}} = \frac{1}{10^{20}}$$

$p(x)$  es equivalente a  $q(x)$   $\rightarrow$  si ✓

$p(x)$  no es equivalente a  $q(x)$   $\rightarrow$   $\Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$

$$r(x) = p(x) - q(x)$$

- ..2 ..1  
.. .

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{\text{r}_1, \dots, r_k}, s_1, \dots, s_l \right\}$$

$$\frac{1}{100^{10}} = \frac{1}{10^{20}}$$

$p(x)$  es equivalente a  $q(x)$  → si ✓

$p(x)$  no es equivalente a  $q(x)$  →  $\Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$

$$r(x) = p(x) - q(x)$$

$$(x_1+1)(x_2+1)\dots(x_n+1)$$

$$x_1 \dots x_n$$

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{\text{r}_1, \dots, r_k}, s_1, \dots, s_l \right\}$$

$$\frac{1}{100^{10}} = \frac{1}{10^{20}}$$

$p(x)$  es equivalente a  $q(x)$  → si ✓

$p(x)$  no es equivalente a  $q(x)$  →  $\Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$

$$r(x) = p(x) - q(x)$$

$$\frac{(x_1+1)(x_2+1)\dots(x_n+1)}{\{x_1, \dots, x_n\}}$$

$$x_1 \dots x_n + \dots \sim f \downarrow$$

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{}, s_1, \dots, s_\ell \right\}$$

$$\frac{1}{100^{10}} = \frac{1}{10^{20}}$$

$p(x)$  es equivalente a  $q(x)$   $\rightarrow$  si ✓

$p(x)$  no es equivalente a  $q(x)$   $\rightarrow$   $\Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$

$$r(x) = p(x) - q(x)$$

$$\frac{(x_1+1)(x_2+1)\dots(x_n+1)}{\{x_1, \dots, x_n\}}$$

$$x_1 \dots x_n + \dots - \dots + 1$$

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{\text{r}_1, \dots, r_k}, s_1, \dots, s_l \right\}$$

$$\frac{1}{100^{10}} = \frac{1}{10^{20}}$$

$p(x)$  es equivalente a  $q(x)$   $\rightarrow$  si ✓

$p(x)$  no es equivalente a  $q(x)$   $\rightarrow$   $\Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$

$$r(x) = p(x) - q(x)$$

$$p(x_1, x_2) = x_1 - x_2$$

$$\{x_1, \dots, x_n\}$$

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{\text{r}_1, \dots, r_k}, s_1, \dots, s_l \right\}$$

$$\frac{1}{100^{10}} = \frac{1}{10^{20}}$$

$p(x)$  es equivalente a  $q(x)$  → si ✓

$p(x)$  no es equivalente a  $q(x)$  →  $\Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$

$$r(x) = p(x) - q(x)$$

$$p(x_1, x_2) = x_1 - x_2$$

$$\{x_1, \dots, x_n\}$$

$$K = 1 + \max \left\{ \underbrace{r_1, \dots, r_k}_{\text{r}_1, \dots, r_k}, s_1, \dots, s_l \right\}$$

$$\frac{1}{100^{10}} = \frac{1}{10^{20}}$$

$p(x)$  es equivalente a  $q(x)$  → si ✓

$p(x)$  no es equivalente a  $q(x)$  →  $\Pr_a(p(a) = q(a)) = \Pr_a(r(a) = 0)$

$$r(x) = p(x) - q(x)$$

$$p(x_1, x_2) = x_1 - x_2 \quad \{x_1, \dots, x_n\}$$

$$\Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}.$$

$\phi \models A \subseteq Q$



$$\Pr_{a_1, \dots, a_n}(p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}.$$

$\phi \models A \subseteq Q$

$$P(x_1, x_2) = (x_1 - 2)(x_2 - 4)$$

$$V(f) = \{(x_1, x_2) \in \mathbb{R}^2 : f(x_1, x_2) = 0\}$$



$\Pr_{a_1, \dots, a_n}(p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}$

$\phi \models A \subseteq Q$

$$P(x_1, x_2) = (x_1 - 2)(x_2 - 4)$$
$$\Rightarrow \frac{1}{3}$$

$$A = \{0, 1, -1\}$$

$$\Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}.$$

$\phi \models A \subseteq Q$

$$P(x_1, x_2) = (x_1 - 2)(x_2 - 4)$$
$$\Rightarrow \Pr_{x_1, x_2 \in \{-1, 0, 1\}} (P(x_1, x_2) = 0) \leq \frac{2}{3}$$
$$A = \{-1, 0, 1\}$$

$$\Pr_{a_1, \dots, a_n}(p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}.$$

$\phi \models A \subseteq Q$

$$P(x_1, x_2) = (x_1 - 2)(x_2 - 4)$$
$$\Rightarrow \frac{0}{9} \leq \frac{2}{3}$$
$$A = \{0, 1, -1\}$$
$$(a_1, a_2)$$

$$\Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}$$

$\phi \models A \subseteq Q$

$$P(x_1, x_2) = (x_1 - 2)(x_2 - 4)$$
$$\Rightarrow \frac{0}{9} \leq \frac{2}{3}$$
$$A = \{2\}$$
$$(a_1, a_2)$$

$$p(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n}(p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}.$$

$\phi \models A \subseteq Q$

$$P(x_1, x_2) = (x_1 - 2)(x_2 - 4)$$
$$\Rightarrow \frac{0}{9} \leq \frac{2}{1}$$
$$A = \{2, 3, 4\}$$
$$(a_1, a_2)$$

$$p(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n}(p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}.$$

$\phi \models A \subseteq Q$

$$P(x_1, x_2) = (x_1 - 2)(x_2 - 4)$$
$$\Rightarrow \frac{0}{9} \leq \frac{2}{3}$$
$$A = \{2, 3, 4\}$$
$$(a_1, a_2)$$

$$p(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n}(p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}.$$

$\phi \models A \subseteq Q$

$$P(x_1, x_2) = (x_1 - 2)(x_2 - 4)$$
$$\Rightarrow \frac{0}{9} \leq \frac{2}{3}$$
$$A = \{2, 3, 4\}$$
$$(a_1, a_2)$$
$$\begin{array}{c} (2, 2) \\ (2, 3) \\ (2, 4) \end{array}$$

$\Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}$

$\phi \models A \subseteq Q$

$$P(x_1, x_2) = (x_1 - 2)(x_2 - 4)$$
$$\Rightarrow \frac{0}{19} \leq \frac{2}{3}$$
$$A = \{2, 3, 4\}$$
$$(a_1, a_2) \quad \begin{matrix} (2, 2) & (2, 4) \\ (2, 3) & (3, 4) \\ (2, 4) & (4, 4) \end{matrix}$$

$p(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n}(p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}$

$\phi \models A \subseteq Q$

$$P(x_1, x_2) = (x_1 - 2)(x_2 - 4)$$
$$\Rightarrow$$
$$A = \{2, 3, 4\} \leq \frac{2}{3}$$
$$(a_1, a_2) \begin{matrix} (2, 2) \\ (2, 3) \\ (2, 4) \end{matrix} \begin{matrix} (\cancel{2}, 4) \\ (3, 4) \\ (\cancel{4}, 4) \end{matrix}$$
$$\frac{5}{9}$$

$\Pr_{a_1, \dots, a_n}(P(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}$

$\phi \models A \subseteq Q$

$$P(x_1, x_2) = (x_1 - 2)(x_2 - 4)$$
$$\Rightarrow \frac{5}{9} \leq \frac{2}{3}$$
$$A = \{2, 3, 4\}$$
$$(a_1, a_2)$$

$(2, 2)$	$\cancel{(2, 4)}$
$(2, 3)$	$(3, 4)$
$\underline{(2, 4)}$	$(4, 4)$

$$5$$

$$\Pr_{a_1, \dots, a_n}(p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}.$$

$\phi \models A \subseteq Q$

$$P(x_1, x_2) = (x_1 - 2)(x_2 - 4)$$
$$A = \{2, 3, 4\} \Rightarrow \frac{5}{9} \leq \frac{2}{3}$$
$$(a_1, a_2) \begin{matrix} (2, 2) \\ (2, 3) \\ (2, 4) \end{matrix} \begin{matrix} (\cancel{2}, \cancel{4}) \\ (3, 4) \\ (\cancel{4}, 4) \end{matrix}$$

5

$$\Pr_{a_1, \dots, a_n}(p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}.$$

$\phi \models A \subseteq Q$

$$P(x_1, x_2) = (x_1 - 2)(x_2 - 4)$$
$$A = \{2, 3, 4\} \Rightarrow \frac{5}{9} \leq \frac{2}{3}$$
$$(a_1, a_2) \begin{matrix} (2, 2) \\ (2, 3) \\ (2, 4) \end{matrix} \begin{matrix} (\cancel{2}, \cancel{4}) \\ (3, 4) \\ (\cancel{4}, 4) \end{matrix}$$

5

$$\Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}.$$

$\phi \models A \subseteq Q$

$$p(x_1, \dots, x_n)$$

$$q(x_1, \dots, x_n)$$

$$(2x_1 + 3x_2 + 4)\left(\frac{2}{3}x_1 - \frac{3}{4}x_2 + 8\right)$$

$$p(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n}(p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}.$$

$\phi \models A \subseteq Q$

$$p(x_1, \dots, x_n)$$

$$q(x_1, \dots, x_n)$$

$$- K = 1 + \max \{r_1, \dots, r_e, s_1, \dots, s_m\}$$

$$A = \{1, \dots, 100K\}$$

$$(2x_1 + 3x_2 + 4)(\frac{2}{3}x_1 - \frac{3}{4}x_2 + 8)$$

$$P(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n}(P(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}$$

$\phi \models A \subseteq Q$

$$P(x_1, \dots, x_n)$$

$$g(x_1, \dots, x_n)$$

$$K = 1 + \max\{r_1, \dots, r_e, s_1, \dots, s_m\}$$

$$A = \{1, \dots, 100K\}$$

elección:  $a_1, \dots, a_n \in A$  de manera uniforme  
e independiente

if  $P(a_1, \dots, a_n) = g(a_1, \dots, a_n)$  then return Si  
else return NO

$$\Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}$$

$\phi \models A \subseteq Q$

$p(x_1, \dots, x_n)$

$g(x_1, \dots, x_n)$

$$K = 1 + \max \{r_1, \dots, r_e, s_1, \dots, s_m\}$$

$$A = \{1, \dots, 100K\}$$

elección:  $a_1, \dots, a_n \in A$  de manera uniforme  
e independiente

if  $p(a_1, \dots, a_n) = g(a_1, \dots, a_n)$  then return Si  
else return NO

$$p(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}$$

$\phi \models A \subseteq Q$

$p(x_1, \dots, x_n)$   
 $q(x_1, \dots, x_n)$  non  
equivalentes

$$\Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) \neq q(a_1, \dots, a_n)) =$$
$$\Pr_{a_1, \dots, a_n} (r(a_1, \dots, a_n) = 0) \leq$$

$$r(x_1, \dots, x_n) =$$

$$p(x_1, \dots, x_n) -$$
$$q(x_1, \dots, x_n)$$

$$p(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}$$

$\phi \models A \subseteq Q$

$$p(x_1, \dots, x_n)$$

$q(x_1, \dots, x_n)$  no non  
equivalentes

$$r(x_1, \dots, x_n) =$$

$$p(x_1, \dots, x_n) -$$

$$q(x_1, \dots, x_n)$$

$$\Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = q(a_1, \dots, a_n)) =$$

$$\Pr_{a_1, \dots, a_n} (r(a_1, \dots, a_n) = 0) \leq \frac{K}{|A|} = \frac{K}{100K}$$

$$= \frac{1}{100}$$

Then

$$\Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}$$

$\phi \models A \subseteq Q$

$p(x_1, \dots, x_n)$ ,  $q(x_1, \dots, x_n)$  non-equivalent

$$\Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = q(a_1, \dots, a_n)) =$$

$$\Pr_{a_1, \dots, a_n} (r(a_1, \dots, a_n) = 0) \leq \frac{K}{|A|} = \frac{K}{100K} = \frac{1}{100}$$

$r(x_1, \dots, x_n) =$

$p(x_1, \dots, x_n) -$

$q(x_1, \dots, x_n)$

$$\Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}$$

$\phi \models A \subseteq Q$

$p(x_1, \dots, x_n)$   
 $q(x_1, \dots, x_n)$  non  
 equivalentes

 $\Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = q(a_1, \dots, a_n)) =$ 
 $\Pr_{a_1, \dots, a_n} (r(a_1, \dots, a_n) = 0) \leq \frac{K}{|A|} = \frac{K}{100K} = \frac{1}{100}$ 

$r(x_1, \dots, x_n) =$   
 $p(x_1, \dots, x_n) -$   
 $q(x_1, \dots, x_n)$

Do

$$p(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}$$

$\phi \models A \subseteq Q$

$p(x_1, \dots, x_n)$  non  
 $q(x_1, \dots, x_n)$  equivalentes

$$\Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = q(a_1, \dots, a_n)) =$$

$$\Pr_{a_1, \dots, a_n} (r(a_1, \dots, a_n) = 0) \leq \frac{K}{|A|} = \frac{K}{100K} = \frac{1}{100}$$

$$r(x_1, \dots, x_n) =$$

$$p(x_1, \dots, x_n) -$$

$$q(x_1, \dots, x_n)$$

10

$$p(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}$$

$\phi \models A \subseteq Q$

$$p(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = q(a_1, \dots, a_n)) =$$

$q(x_1, \dots, x_n)$  non  
equivariantes

$$\Pr_{a_1, \dots, a_n} (r(a_1, \dots, a_n) = 0) \leq \frac{K}{|A|} = \frac{K}{100K}$$

$$r(x_1, \dots, x_n) =$$

$$p(x_1, \dots, x_n) -$$

$$q(x_1, \dots, x_n)$$

etc.

$$P(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n}(P(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}.$$

$\phi \models A \subseteq Q$

$$P(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n}(P(a_1, \dots, a_n) = \bar{g}(a_1, \dots, a_n)) =$$

$$g(x_1, \dots, x_n) \text{ non-equivalent}, \Pr_{a_1, \dots, a_n}(r(a_1, \dots, a_n) = 0) \leq \frac{K}{|A|} = \frac{K}{100K}$$

$$\boxed{(3x_1+2x_2+7) \cdot (-3x_1+2x_2+8) \cdot (\quad) \cdot (\quad)} + \frac{1}{100}$$

$$\boxed{(\quad) \cdot (\quad) \cdot (\quad) \cdot (\quad)} + 1$$

$$p(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}$$

$\phi \models A \subseteq Q$

$$p(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = q(a_1, \dots, a_n)) =$$

$$q(x_1, \dots, x_n) \text{ non equivalent}, \Pr_{a_1, \dots, a_n} (r(a_1, \dots, a_n) = 0) \leq \frac{K}{|A|} = \frac{K}{100K}$$

$$\boxed{(3x_1+2x_2+7) \cdot (3x_1+2x_2+8) \cdot (\quad) \cdot (\quad)} + \frac{1}{100}$$

$$\boxed{(\quad) \cdot (\quad) \cdot (\quad) \cdot (\quad)} + (\quad)$$

$$\begin{aligned}
 & p(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}. \\
 \phi \models A \subseteq Q & \\
 p(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = 0) &= \\
 q(x_1, \dots, x_n) \text{ non} & \\
 \text{equivalentes} & \Pr_{a_1, \dots, a_n} (r(a_1, \dots, a_n) = 0) \leq \frac{K}{|A|} = \frac{K}{100K} = \frac{1}{100} \\
 & \\
 \boxed{(3x_1 + 2x_2 + 7) \cdot (-3x_1 + 2x_2 + 8) \cdot (\quad) \cdot (\quad)} &+ \\
 r_1 & \\
 & \\
 \boxed{(\quad) \cdot (\quad) \cdot (\quad) \cdot (\quad) (n_1)} &+ \\
 r_2 &
 \end{aligned}$$

$$p(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n}(p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}.$$

$\phi \models A \subseteq Q$

$$p(x_1, \dots, x_n) \quad \Pr_{a_1, \dots, a_n}(p(a_1, \dots, a_n) = q(a_1, \dots, a_n)) =$$

$$q(x_1, \dots, x_n) \text{ no non} \quad \Pr_{a_1, \dots, a_n}(r(a_1, \dots, a_n) = 0) \leq \frac{K}{|A|} = \frac{K}{100K}$$

$$\boxed{(3x_1+2x_2+7) \cdot ( -3x_1+2x_2+8) \cdot (\quad) \cdot (\quad)} + \frac{1}{100}$$

$$\boxed{(\quad) \cdot (\quad) \cdot (\quad) \cdot (\quad)} + 1$$

$$\begin{aligned}
 & p(x_1, \dots, x_n), \quad \Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}. \\
 \phi \models A \subseteq Q \\
 & p(x_1, \dots, x_n) \quad \Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = q(a_1, \dots, a_n)) = \\
 & q(x_1, \dots, x_n) \text{ non-equivalent} \quad \Pr_{a_1, \dots, a_n} (r(a_1, \dots, a_n) = 0) \leq \frac{K}{|A|} = \frac{K}{100K} = \frac{1}{100} \\
 & \boxed{(3x_1 + 2x_2 + 7) \cdot (-3x_1 + 2x_2 + 8) \cdot (\quad) \cdot (\quad)} + \\
 & \boxed{(\quad) \cdot (\quad) \cdot (\quad) \cdot (\quad)} + 1
 \end{aligned}$$

$$\begin{aligned}
 & p(x_1, \dots, x_n), \quad \Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}. \\
 \phi \models A \subseteq Q \\
 & p(x_1, \dots, x_n) \quad \Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = q(a_1, \dots, a_n)) = \\
 & q(x_1, \dots, x_n) \text{ non-equivalent}, \quad \Pr_{a_1, \dots, a_n} (r(a_1, \dots, a_n) = 0) \leq \frac{K}{|A|} = \frac{K}{100K} = \frac{1}{100} \\
 & \boxed{(3x_1 + 2x_2 + 7) \cdot (3x_1 + 2x_2 + 8) \cdot (\quad) \cdot (\quad)} + \\
 & \boxed{(\quad) \cdot (\quad) \cdot (\quad) \cdot (\quad)}_{r_1} + 1 \\
 & \boxed{(\quad) \cdot (\quad) \cdot (\quad) \cdot (\quad)}_{r_2} + 1
 \end{aligned}$$

$$\begin{aligned}
 & p(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}. \\
 \phi \models A \subseteq Q & \\
 p(x_1, \dots, x_n) \text{ non} & \Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = q(a_1, \dots, a_n)) = \\
 q(x_1, \dots, x_n) \text{ equivalentes} & \Pr_{a_1, \dots, a_n} (r(a_1, \dots, a_n) = 0) \leq \frac{K}{|A|} = \frac{K}{100K} = \frac{1}{100} \\
 \boxed{(3x_1 + 2x_2 + 7) \cdot (3x_1 + 2x_2 + 8) \cdot (\quad) \cdot (\quad)} + & \\
 \boxed{(\quad) \cdot (\quad) \cdot (\quad) \cdot (\quad) (r_1)} + (\quad) &
 \end{aligned}$$

$$p(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n}(p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}.$$

$\phi \models A \subseteq Q$

$$p(x_1, \dots, x_n) = \Pr_{a_1, \dots, a_n}(p(a_1, \dots, a_n) = \bar{g}(a_1, \dots, a_n)) =$$

$$g(x_1, \dots, x_n) \text{ non-equivalent} \quad \Pr_{a_1, \dots, a_n}(r(a_1, \dots, a_n) = 0) \leq \frac{K}{|A|} > \frac{K}{100K}$$

$$\boxed{(3x_1+2x_2+7) \cdot (3x_1+2x_2+8) \cdot (\quad) \cdot (\quad)} +$$

$$\boxed{(\quad)'(\quad)(\quad)(\quad)(\quad)} + (\quad)$$

$$p(x_1, \dots, x_n), \dots, \Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = 0) \leq \frac{h}{|A|}$$

$\phi \models A \subseteq Q$

$$p(x_1, \dots, x_n) = \Pr_{a_1, \dots, a_n} (p(a_1, \dots, a_n) = \bar{g}(a_1, \dots, a_n)) =$$

$$g(x_1, \dots, x_n) \text{ non-equivalent}, \Pr_{a_1, \dots, a_n} (r(a_1, \dots, a_n) = 0) \leq \frac{K}{|A|} > \frac{K}{100K}$$

$$\boxed{(2x_1+2x_2+7) \cdot (-3x_1+2x_2+8) \cdot (\quad) \cdot (\quad)} +$$

$$\boxed{(\quad) \cdot (\quad) \cdot (\quad) \cdot (\quad)} + 1$$