a, b, c, d, e**??**
a
ab**??**abb
$edbac$
$p(\cdot)$

d
????????????
x, y, z**??**$xxyzx^1$

$mmm - 1m^2$
$p(\cdot)$**??**x, y, z

yx
$m2^m$
x, y, z, w**??**$p(x) = 10, p(y) = 11, p(z) = 6, p(w) = 3yyxx, z, w, yp(x) = 11, p(y) = 9, p(z) = 7, p(w) = 4x$

????????
??
. $IXX\mathcal{R}\ X\mathcal{P}i \in I \succsim_i i\mathcal{D}_i \subset \mathcal{R}$

(). $fi \in I \succsim \in \mathcal{D}_I\ \succsim_i' \in \mathcal{D}_i$

$\succsim_{-i} I \succsim i \in I \succsim_i n - 1(\succsim_1, \ldots, \succsim_{i-1}, \succsim_{i+1}, \ldots, \succsim_n) f(\succsim) f(\succsim_i', \succsim_{-i})$

$f(\succsim_i', \succsim_{-i}) if \succsim i \succsim_i f(\succsim) i$**??**
(). $fi \in I\ \succsim \in \mathcal{D}_I$

i
$i \in I$**??**$x \in Xib \in X$**??**$f(\succsim)\ \succsim_i bf(\succsim) \in Xibbc \in Xi$
(). $x \in \mathrm{X} \succsim \in D_{\mathrm{I}}\ f(\succsim) = x$
$x \in X \succsim$
(). $|X| \geq 3\ f \colon \mathcal{P}^I \to X$
??
(). $A = \{a_1, a_2, \ldots, a_l\}[0, 1]$

$A \succsim_i \in \mathcal{R}\ b(\succsim_i) \in Ak, k' \in \{1, 2, \ldots, l\}$

$A\mathcal{T}$
(). $i\mathcal{D}_i \subset \mathcal{T}\ \succsim \in \mathcal{D}_I b^m(\succsim)\ b(\succsim_1) b(\succsim_2) \ldots b(\succsim_n)\ b^m(\succsim) \in \{b(\succsim_i) : i \in I\}$

$n2\ f^m \colon \mathcal{D}_I \to X\ f^m(\succsim) \stackrel{\text{def}}{=} b^m(\succsim)$
. $i\mathcal{D}_i \subset \mathcal{T}\ f^m \colon \mathcal{D}_I \to A$
??????$\succ$**????**