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**Table of Symbols**

$\{a, b, x\}$	Set with members $a, b$ and $x$
$\{x p(x)\}$	The set of $x$ for which $p(x)$ is true
$p \wedge q$	$p$ and $q$
$p \vee q$	$p$ or $q$
$\neg p$	not $p$
iff	if and only if
$p \Rightarrow q$	$p$ implies $q$
$p \Leftrightarrow q$	$p$ if and only if $q$
$(a, b)$	Ordered pair: $(a, b) = (c, d)$ iff $a = c \wedge b = d$
$a \in A$	$a$ is a member of the set $A$
$A \times B$	$\{(a, b) a \in A \wedge b \in B\}$
<b>R</b>	The real numbers
<b>R<sup>n</sup></b>	The $n$ -dimensional real vector space
$(x_1, \dots, x_n) \in \mathbf{R}^n$	An $n$ -dimensional vector
$f:A \rightarrow B$	A function $b = f(a)$ , where $a \in A$ and $b \in B$
$f(\cdot)$	A function $f$ where we suppress its argument
$f^{-1}(y)$	The inverse of function $y = f(x)$
$\sum_{x=a}^b f(x)$	$f(a) + \dots + f(b)$
$S_1 \times \dots \times S_n$	$\{(s_1, \dots, s_n) s_i \in S_i, i = 1, \dots, n\}$
$\Delta S$	Set of probability distributions (lotteries) over $S$
$[a, b]$	$\{x \in \mathbf{R} a \leq x \leq b\}$
$[a, b)$	$\{x \in \mathbf{R} a \leq x < b\}$
$(a, b]$	$\{x \in \mathbf{R} a < x \leq b\}$
$(a, b)$	$\{x \in \mathbf{R} a < x < b\}$
$A \cup B$	$\{x x \in A \vee x \in B\}$
$A \cap B$	$\{x x \in A \wedge x \in B\}$
$\cup_{\alpha} A_{\alpha}$	$\{x x \in A_{\alpha}$ for some $\alpha\}$
$\cap_{\alpha} A_{\alpha}$	$\{x x \in A_{\alpha}$ for all $\alpha\}$
$A \subset B$	$A \neq B \wedge (x \in A \Rightarrow x \in B)$
$A \subseteq B$	$x \in A \Rightarrow x \in B$