Symbol	Description
$\mathcal{X}$	support of variable X
$\mathcal{Y}$	support of variable Y
$P(X)$	distribution of X
$P(x)$	probability of $X = x$
$P(X,Y)$	joint distribution of (X,Y)
$P(Y|X)$	conditional distribution of Y given X
$P(Y|x)$	conditional distribution of Y given $X = x$
$|\cdot|$	cardinality of a set