Q5. When the results of the logical operation "$x \# y$" are shown in the table below, which of the following expressions is equivalent to the operation "$x \# y$"? Here, "AND" is used for the logical product, "OR" is for the logical sum, and "NOT" is for the logical negation.

x	y	$x \# y$
True	True	False
True	False	False
False	True	False
False	False	True

a) x AND (NOT y)

b) x OR (NOT y)

c) (NOT x) AND (NOT y)

d) (NOT x) OR (NOT y)