\textbf{Not}

\texttt{\texttt{!expr}} is the logical \texttt{not} function. It gives \texttt{False} if \texttt{expr} is \texttt{True}, and \texttt{True} if it is \texttt{False}.

\texttt{Not} gives symbolic results when necessary, and applies various simplification rules to them.  You cannot use the notation \texttt{\texttt{\texttt{/!}}} \texttt{expr} for \texttt{\texttt{Not[expr]}} if it appears at the very beginning of a line. In this case, \texttt{\texttt{\texttt{/!}}} \texttt{expr} is interpreted as a shell escape.

See page 73. See also: \texttt{\texttt{\texttt{LogicalExpand}}}.