1 Warm-up exercise

Give the truth table for $((p \lor q)\&(\neg p \to \neg q)) \to q$.

p	q	$\neg p$	$\neg q$	$p \lor q$	$\neg p \rightarrow \neg q$	$(p \lor q) \& (\neg p \to \neg q)$	$((p \lor q)\&(\neg p \to \neg q)) \to q$
T	Τ	F	F	T	${ m T}$	T	${ m T}$
\mathbf{T}	\mathbf{F}	F	${ m T}$	T	${f T}$	${f T}$	${f F}$
\mathbf{F}	\mathbf{T}	T	\mathbf{F}	T	${ m F}$	F	${f T}$
\mathbf{F}	\mathbf{F}	T	${ m T}$	F	${ m T}$	F	${ m T}$