## Bài 3 Hãy chỉ ra hằng đúng trong các dạng mệnh đề sau:

a.  $[\neg q \land (p \lor q)] \rightarrow q ???$  $[q \land (p \lor q)] \rightarrow q !!!$ 

р	q	<b>¬ q</b>	$\mathbf{p} \lor \mathbf{q}$	¬ q ∧ (p ∨ q)	<b>q</b> ∧ <b>(p</b> ∨ <b>q)</b>	$[\neg \mathbf{q} \land (\mathbf{p} \lor \mathbf{q})] \rightarrow \mathbf{q}$	$[\mathbf{q} \land (\mathbf{p} \lor \mathbf{q})] \rightarrow \mathbf{q}$
0	0	1	0	0	0	1	1
0	1	0	1	0	1	1	1
1	0	1	1	1	0	0	1
1	1	0	1	0	1	1	1

**b.**  $(\mathbf{p} \wedge \mathbf{q}) \rightarrow (\mathbf{p} \rightarrow \mathbf{q})$ 

р	q	(p \ q)	<b>(p</b> → <b>q)</b>	$(\mathbf{p} \wedge \mathbf{q}) \rightarrow (\mathbf{p} \rightarrow \mathbf{q})$
0	0	0	1	1
0	1	0	1	1
1	0	0	0	1
1	1	1	1	1

c.  $[(\mathbf{p} \rightarrow \mathbf{q}) \land (\mathbf{q} \rightarrow \mathbf{r})] \rightarrow (\mathbf{p} \rightarrow \mathbf{r})$ 

p	q	r	<b>(p</b> → <b>q)</b>	( <b>q</b> → <b>r</b> )	$[(\mathbf{p} \to \mathbf{q}) \land (\mathbf{q} \to \mathbf{r})]$	( <b>p</b> → <b>r</b> )	$[(\mathbf{p} \to \mathbf{q}) \land (\mathbf{q} \to \mathbf{r})] \to (\mathbf{p} \to \mathbf{r})$
0	0	0	1	1	1	1	1
0	0	1	1	1	1	1	1
0	1	0	1	0	0	1	1
0	1	1	1	1	1	1	1
1	0	0	0	1	0	0	1
1	0	1	0	1	0	1	1
1	1	0	1	0	0	0	1
1	1	1	1	1	1	1	1