

sci.math: Re: what boolean connectives together with \rightarrow make a complete system?

Re: what boolean connectives together with \rightarrow make a complete system?

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From: Owen (*oorionus_at_yahoo.com*)

Date: 12/21/04

Date: Tue, 21 Dec 2004 15:07:02 -0500

Where are the expected murders of anything that novices say, such as me, express.

Ullrich, G. Frege, Fransen, ..where are your complaints?

Surely , I didn't say something correct, in your view.

"Owen" <oorionus@yahoo.com> wrote in message
news:_8OdnddRjY3CT1vcRVn-uw@rogers.com...

> I. (*nor*)

>

> 1. $\sim p =df (p \text{ nor } p)$

> 2. $p \vee q =df \sim(p \text{ nor } q)$

> 3. $_T =df p \vee \sim p$

> 4. $F =df \sim T$

> 5. $p \& q =df \sim(\sim p \vee \sim q)$

> 6. $p \text{ nand } q =df \sim(p \& q)$

> 7. $p \rightarrow q =df \sim p \vee q$

> 8. $p \text{ -/}\rightarrow q =df \sim(p \rightarrow q)$

> 9. $p \leftrightarrow q =df (p \rightarrow q) \& (q \rightarrow p)$

> 10. $p \text{ xor } q =df \sim(p \leftrightarrow q)$

>

>

> II. (*nand*)

>

> 1. $\sim p =df (p \text{ nand } p)$

> 2. $p \& q =df \sim(p \text{ nand } q)$

> 3. $F =df p \& \sim p$

> 4. $T =df \sim F$

> 5. $p \vee q =df \sim(\sim p \& \sim q)$

> 6. $p \text{ nor } q =df \sim(p \vee q)$

> 7. $p \rightarrow q =df \sim p \vee q$

> 8. $p \text{ -/}\rightarrow q =df \sim(p \rightarrow q)$

> 9. $p \leftrightarrow q =df (p \rightarrow q) \& (q \rightarrow p)$

> 10. $p \text{ xor } q =df \sim(p \leftrightarrow q)$

>

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- >
- > III. ($T, \neg/\rightarrow$)
- >
- > 1. $\sim p =df T \neg/\rightarrow p$
- > 2. $F =df \sim T$
- > 3. $p \rightarrow q =df \sim(p \neg/\rightarrow q)$
- > 4. $p \vee q =df \sim p \rightarrow q$
- > 5. $p \text{ nor } q =df \sim(p \vee q)$
- > 6. $p \& q =df \sim(\sim p \vee \sim q)$
- > 7. $p \text{ nand } q =df \sim(p \& q)$
- > 8. $p \leftrightarrow q =df (p \rightarrow q) \& (q \rightarrow p)$
- > 9. $p \text{ xor } q =df \sim(p \leftrightarrow q)$
- >
- >
- > IV. (F, \rightarrow)
- >
- > 1. $\sim p =df p \rightarrow F$
- > 2. $T =df \sim F$
- > 3. $p \neg/\rightarrow q =df \sim(p \rightarrow q)$
- > 4. $p \vee q =df \sim p \rightarrow q$
- > 5. $p \text{ nor } q =df \sim(p \vee q)$
- > 6. $p \& q =df \sim(\sim p \vee \sim q)$
- > 7. $p \text{ nand } q =df \sim(p \& q)$
- > 8. $p \leftrightarrow q =df (p \rightarrow q) \& (q \rightarrow p)$
- > 9. $p \text{ xor } q =df \sim(p \leftrightarrow q)$
- >
- > V. (\sim, \vee)
- >
- > 1. $T =df p \vee \sim p$
- > 2. $F =df \sim T$
- > 3. $p \text{ nor } q =df \sim(p \vee q)$
- > 4. $p \rightarrow q =df \sim p \vee q$
- > 5. $p \neg/\rightarrow q =df \sim(p \rightarrow q)$
- > 6. $p \& q =df \sim(\sim p \vee \sim q)$
- > 7. $p \text{ nand } q =df \sim(p \& q)$
- > 8. $p \leftrightarrow q =df (p \rightarrow q) \& (q \rightarrow p)$
- > 9. $p \text{ xor } q =df \sim(p \leftrightarrow q)$
- >
- > VI. ($\sim, \&$)
- >
- > 1. $F =df p \& \sim p$
- > 2. $T =df \sim F$
- > 3. $p \text{ nand } q =df \sim(p \& q)$
- > 4. $p \vee q =df \sim(\sim p \& \sim q)$
- > 5. $p \text{ nor } q =df \sim(p \vee q)$
- > 6. $p \rightarrow q =df \sim p \vee q$
- > 7. $p \neg/\rightarrow q =df \sim(p \rightarrow q)$
- > 8. $p \leftrightarrow q =df (p \rightarrow q) \& (q \rightarrow p)$
- > 9. $p \text{ xor } q =df \sim(p \leftrightarrow q)$
- >
- > VII. (\sim, \rightarrow)

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>
> 1. $T = df p \rightarrow p$
> 2. $F = df \sim T$
> 3. $p \not\rightarrow q = df \sim(p \rightarrow q)$
> 4. $p \vee q = df \sim p \rightarrow q$
> 5. $p \text{ nor } q = df \sim(p \vee q)$
> 6. $p \& q = df \sim(\sim p \vee \sim q)$
> 7. $p \text{ nand } q = df \sim(p \& q)$
> 8. $p \leftrightarrow q = df (p \rightarrow q) \& (q \rightarrow p)$
> 9. $p \text{ xor } q = df \sim(p \leftrightarrow q)$
>
>
>
>
>
> "|-|erc" <h@r.c> wrote in message
news:32n8q4F3onqg5U1@individual.net...
>> like NOT and OR is complete.
>>
>> NOR is complete
>>
>> \rightarrow and ?
>>
>> Herc
>>
>> --
>> "YOU CAN'T PROVE ME"
>> If you prove it's true then it has a proof, which makes it false
>> If you don't prove it, then its true
>> 10,000 people in sci.math ALL believe this is irrefutable that
> mathematics will always be incomplete.
>>
>>
>
>