

Tablovač pre prvorádovú logiku

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(1)	F(a→b)	[1] x
(2)	F(a ∧ b)	[2] x
(3)	Ta	[1] x
(4)	Fb	[1] x
<hr/>		
(5)	Fa	[2] x
	α β *	
(6)	Fb	[2] x
	α β *	

This tableau does not prove:

$\vdash (a \rightarrow b), (a \wedge b)$

Prettify formulas

Print

Export as JSON

Import from JSON

Help

Use $\&$, \wedge or \wedge for conjunction, \vee , \vee or \vee for disjunction, \rightarrow or \rightarrow for implication, and \neg , \sim or \neg for negation. Conjunction and disjunction are strictly binary. Each node of the tableau contains a signed formula, i.e. it must be prefixed by T or F .

To enter a premise / assumption (which you want to prove), make it reference itself (i.e. "(1) F ... [1]").

α-rules

$\frac{T (A \wedge B)}{T A}$	$\frac{F (A \vee B)}{F A}$	$\frac{F (A \rightarrow B)}{T A}$	$\frac{T \neg A}{F A}$	$\frac{F \neg A}{T A}$
$T B$	$F B$	$F B$		

β-rules

$\frac{F (A \wedge B)}{F A \mid F B}$	$\frac{T (A \vee B)}{T A \mid T B}$	$\frac{T (A \rightarrow B)}{F A \mid T B}$
---------------------------------------	-------------------------------------	--

<http://elm-lang.org/docs>

```
-- TYPE MISMATCH ----- tmp.elm
```

The argument to function `getFullName` is causing a mismatch.

```
21| getFullName
22|> {
23|>   firstName = "Sam",
24|>   lastName = "Sample",
25|>
26|>   hairColor = "Brown",
27|>   eyeColor = "Brown",
28|>
29|>   address = "1337 Elite st",
30|>   phoneNumber = "867-5309",
31|>   email = "foo@bar.com",
32|>
33|>   pets = 2
34|> }
```

Function `getFullName` is expecting the argument to be:

```
{ ..., phoenNumber : ... }
```

But it is:

```
{ ..., phoneNumber : ... }
```

Hint: I compared the record fields and found some potential typos.

```
phoenNumber <-> phoneNumber
```

```
node : Tableau -> Node
```

```
node t =
  case t of
    Leaf n _ -> n
    Alpha n _ -> n
    Beta n _ _ -> n
```

```
formula : Tableau -> Result Parser.Error (Signed Formula)
```

```
formula t =
  (node t).text
  |> Formula.parseSigned
```

```
mapNode : (Node -> Node) -> Tableau -> Tableau
```

```
mapNode f t =
  case t of
    Leaf n mc -> Leaf (f n) mc
    Alpha n ct -> Alpha (f n) (mapNode f ct)
    Beta n lt rt -> Beta (f n) (mapNode f lt) (mapNode f rt)
```

```
---
convert to table
---
```

```
type alias CellWidth = Int
type alias Cell = (CellWidth, Maybe Zipper) --- the 'Node' at that point
```

```
type alias Row = List Cell
```

```
type alias Table = List Row
```

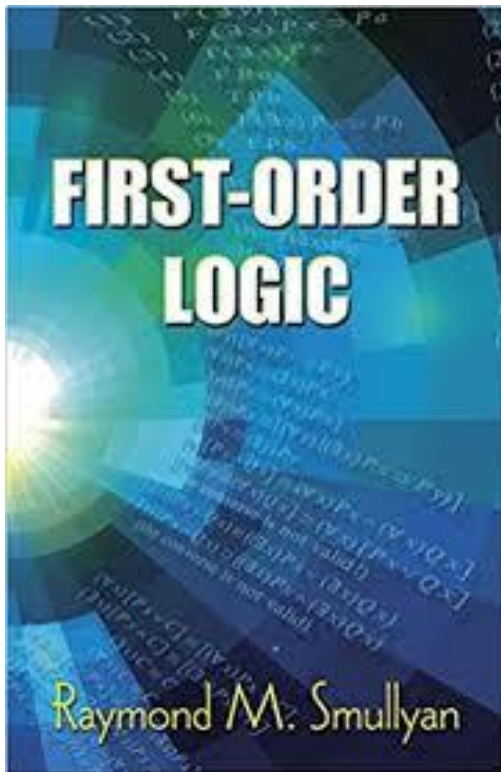
```
asTable : Tableau -> Table
```

```
asTable t =
  let
    z = zipper t
    (c, tbl) = asHeadedTable z
  in
    [[c]] ++ tbl
```

```
asHeadedTable : Zipper -> (Cell, Table)
```

```
asHeadedTable (t, bs) =
  case t of
    Leaf n _ -> ( (1, Just (t,bs)), [] )
    Alpha n st -> let
```

Raymond M. Smullyan. Logika prvého rádu. Bratislava: Alfa, 1979
(Z anglického originálu preložil Svätoslav Mathé.)



Vhodna kniha ako úvod do kvantifikačnej teórie.

Jednoducho a matematicky elegantne vysvetľuje a orientuje sa na tablový kalkul.

Skladá sa z 3 častí.

- Formuly, boolean hodnoty, princíp všeobecného tabla
- Prvorádová logika, konzistentnosť teórie, teória kvantifikátorov, tablo prvorádovej logiky
- Tablo prvorádovej logiky


<https://github.com/FMFI-UK-1-AIN-412/lpi/tree/master/docs/lecs>

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 crnkjck lecs: 12. prednaska Latest commit 4c6cebb on 22 May

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README.md	lecs: 6. prednaska + README	8 months ago
lec01.pdf	docs/lecs: Poznamky a slajdy z prvych 2 prednasok	9 months ago
lec02.pdf	docs/lecs: Poznamky a slajdy z prvych 2 prednasok	9 months ago
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Ďakujem za pozornosť

<https://nitrajka.github.io/>