Preping:

$$(A \Rightarrow B) = (A \cup B)$$

$$A \wedge B = {}^{\gamma}(A = {}^{\gamma}B)$$

TI: 8

Ta: cud

12: C va Tr2: O prázdue unozina heauser/

Q prázdna u nozina hlauzúl - nige taxe tológia

{ Q } prosena heurne -> taitologia je tantologia

KNF { 8 8 } -> leontradileia [T11. 1721 # 0

Q - spinitelnal |T11.|T21=0

5.2. a) (av2b) ((avc) n (avbuc)

To(a) : 0

Traal: aub, aubuc

T2(a): 200c

T12 (a): Zove, bre

~ (a): 7bvc, bvc

To(&): Ø

Tn (b): buc

T2 (W) : 20 VC

T12 (6): C

T(b): C

modely:

001

101

111

#01

111

of(c) = 1

かんし)=1 をしか)=0

y(a)=1 y(a)=1 y(a)=0

104 7 :44

To : Q

T1 : C

T2: 0

T12:0

unozina

7 : D prázdna ulauzul , > splnitelna

```
6) (a, 2), (2, c), (2, 2), b
```

To(a): 20 UC, 0

Tn(a): av&,

12(a): av2

T12(a): 26 v2

T(a): 202, 200, 0

To (b) : Ø

Tn(w): b

T2 (6): 2000 / buc

T12(b): 2, C

7: 20,0

To(c): Ø

T1(c): C

T2(c): 7C

T12: 203 prázdna unozina bleuzuja boruwla je hontradikcia

c) (autuc) n (a v2b) n (2 v2) n (a v2)

To(a): 2002

Ty(a): aubuc

72(a): avb, avc

T12(a) 1 Ø

7(a): bvc

To (&): 0

Ty (0): 8

T2 (b): 20 v'c

T12 (6): Ø

7(b): D présdue Mauril,

boruwla je spinitelina

 $\mathcal{X}(c)=1 \qquad \mathcal{X}(c)=0$ $\mathcal{X}(b)=0 \qquad \mathcal{X}(b)=1 \qquad \mathcal{X}(b)=0$ $\mathcal{X}(a)=0 \qquad \mathcal{X}(a)=0 \qquad \mathcal{X}(a)=1$

modely: 100 010 001

```
(av) ~ (bv) ~ (cv2) ~ (av bvc) ~ (a v) bv2)
  To (a): b v 2,
  T1(a): av b, av bvc
  72(a): cva, 2016 v2
                                         gl(c)=1
 Tru(a): 200, 200, bvc
 ~ (a): 2000, 2000, 600
                                      2(6)=0
 To (b) , Ø
                                    \mathcal{J}(\alpha) = 1 \mathcal{J}(\alpha) = 0
 T1(6): buc
 T2(&): 2vc, 8v2
                                          # 01
 T12(6): C
 T(e): C
 To (c) = 8
 T1(c) : C
 T2(c): Ø
                unorina
 7: Ø prázoua hlauzul, splniteľnal
5.2. e) (a16) n (cva) n (202) n (202) n (202) n (202) n (202)
To(a): cvd, bva, Lv2
T1(a): aub,
72(a): ave, rava
T12(a): bv2, bvd
T(a): cva, wva, bvc, bvc, bvd
To(0): cva,
                                    To(d):0
Ta(b): Kvc, bud
                                    T1(d): d
Te(b): 20 vd, 20 vc
                                    T2(d): 'd
Tru(0): 200, 2, d
                                     Tyz(d) & D} prázone hlaurula
T(v): cva, eva, 2, à
                                                     Conhadileia
 To(c): 2
 T,(c): cvd
 72(c): cvd, c
 T12(c): {d, dv 2}
7(c)= 3d, d9
```

```
To(a): eva, bud
          Th(a): avbucud, aveud, aub
          T2(a) : 2 v bvc,
         T12(a): b-vc
                                                   8(d)=0
                                          H(d)=1
          T(c): Luc, Cud, bud
                                    8(c)=1 8(c)=0
                                                       2(c)=1
          To(A): cra
          T1(1): buc, bud f(e)=1 f(b)=0 f(b)=1
                                                    \mathcal{X}(b)=1
          T2 (&): Ø
                          A(a)=1 H(a)=0
           T12: Ø
                                                   2(a)=1 2(a)=1
           \widetilde{\tau}: (cva)
                                  modely: 1010
           To(c): Ø
                                                       1#10
                                            1110
                                                      #101 => #1#1
           Tn(c): cud
                                           0101
          T2 (c) : Ø
                                                      # 111
                            unozive
           T12 : Ø
            T(c): & prázous blancies, borunda de apinitetne
2.6.a) T = A
    T= { avb, avc, bvc} (KNF)
   A: "(AV b VC)
 je T = A hontradiheia?
  (aub) n (auc) n (buc) n (aubuc)
 To (a) : 36 v c }
 Traal: {avb, avc, avbvc}
 T2(a): Ø
 T12(a): 8
 7(a): {bvc}
  To (b): Ø
  71 (b): { buc}
 T2(6): 8
  Tiz(6): 0
              prosana heansul, renumano lent de spinitelina a
  T(b): 8
              tede nige toutologicaju obstedhou
              (spinitein' formuly a negative by hebbli spinene v
```

Brodnej unf)

2.6.6) T = {avb, buc, auc} A = aubuc

(aut), (buc), (auc), (autuc) Pan'bn'e

70(a): buc 12/c

Ta(a): ausiauc

T2(a): 2

T12(a): {b, c}

7(a): { bvc, b, b, c, c}

To (b): c, &

Tn(b): buc, b

で(ひ): な

T12(b): c/l

て(か): {こっと子

To(c): Ø

T1(c): C

T2(c): 'C

T12(c): 303

prázdue unozine

7(c): 303

blaurula, KNF de teartradiliera teda A je taut. otô skedhow T

```
2.6c) T = \frac{2}{3}av^{2}b_{1}ev^{2}d_{1}bvd^{2}d_{2}

A = (d = > c)

A = (^{7}dvc)

T = ^{7}A ^{7}A = ^{7}(^{2}dvc) = ^{7}c \wedge d
```

To (a): cvd, bvd, 2, d

Tn(a): av 6

T2(a): Ø

T12 (a): Ø

 $\tilde{\tau}(a) = T_0(a)$

To(b): crd, 2, d

T1 (b): bud T2(b): Ø T12(b): Ø

 $\frac{\lambda}{T}(b) = T_0(b)$

To (c): d

T1(c): cvd T2(c): 2 T12(c): 2

T(c): { a, d}

To (a):0

Tn(d): d T2(d): d #12(d): & 123

prázduc hlaurula

tautologický dôsledole

```
T= & a => b, b = s'a, b => a &
  A: 20 1 -> 2 (aub)
    ('a v b) n ('b v'a) n (2 v a) n (a v b)
To(a): Ø
To(a): ave, aut
T2(a): avb, avb
Tn(a): 26, 6
 ~ (a): { b, 2 by
To(&): Ø
 Tn (b): b
 で(と):か
 T12(8): 803
                    Clau Enla rear in
 T(b): { & présoure =
                      THA
 5.5 a)
                                  10) (an 26) v (an 6) v (an 61c) v
 (anb) v (anb) v (2a)
                                    (2 n' + n'c) v (an' + n c)
 To(a): 0
                                  To (a): Ø
 T1(a): and, an's
                                  Traco: and, andre, andre
を(a): る
                                  T2(9): 216, 2016,2
T12(a): 6, 26
                                 T12(a): 2 12, b1c,
F(a): Eb, bg
                                  T(a): { 2 2 , b , c , b , c }
To ( & ) : & T1 ( & ) : & T2 ( & ) : %
                                 TO(b): 0 T1(b): NIC TE(b): 2012
                                  T12(12): 長田子 ~(16): 203
Tn2 (b): { 83
T (107: 2 D) j prázdna ma hlanzula -> tant.
                                                  prázdua un hlanzul
                                                         => nieje tout.
                                                V ~ (b) = 0.0=0=8 V
                                 of(c)=1
                                         8(c) = 0
                                                    hedy neplati?
                                J(b)=1
                                           X(W)=1
```

2(a) =

d(a)=1

5. 5. d) (anc) v (bnc) v (2 n2) v (2 nb) v (2 nc) v (2 n2)

To(a): bnc, 2 n2, 2 nc
To(a): (anc),
Te(a): (anc),
Te(a): and, and no
Tiz(a): bnc, backe
T: bnc, bnc, bnc

To(b): 8 To(b): bre To(b): 26 n°c, 26 n°c Tre(b): C T(b): C

To(c): D

To(c): C

To(c): D

To(c): D

To(c): D

préseduc un leaurell

- nieje tautológia