

S.C. SANITECH S.R.L

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# SIMPLATE®

AOAC Official\*  
Methods: 2002.07,  
2002.11, 2005.03

MicroVal Certification  
(in accordance with ISO 16140)  
Certificate No. 2009LR26  
Certificate No. 2009LR25

Total numarul de bacterii \*  
Coliformes/E.coli\*  
Drojdii si mucegaiuri\*  
Enterobacterii  
Campylobacter

**BioControl S.U.A**  
Results Right Now

# SIMPLATE®

## Prezentare:

- **TPC - SimPlate Total numar de bacterii (Total Plate Count)**
- **TPC –CI – Simplate Total numar de bacterii cu indicator color (Total Plate Color Indicator)**
- **CEC - SimPlate numar total de Coliform si *E.coli***
- **CEC-CI – Simplate numar total de Coliformi si E.coli cu Indicator Color**
- **SYM - Simplate numar de drojdii si mucegaiuri**
- **SYM-CI- Simplate numar de drojdii & mucegaiuri cu Indicator Color**
- **Simplate Enterobacteriaceae**
- **Simplate Campylobacter**

# SIMPLATE®



- ✓ **Simplete este o placa cu 84 de celule (godeuri) pe care se pot numara pana la 738 cfu,**
- ✓ **Mediu de cultura este Broth nu Agar,**
- ✓ **Fiecare celula contine 0.06ml de mediu + proba,**
- ✓ **O singura placa Simplete inlocuieste doua placi traditionale de Petri sau trei petri films.**

# SIMPLATE®

## Principiul SimPlate cu Color Indicator:

- Este o metoda bazata pe o reactie de oxidoreducere, deci nu este o reactie enzimatica.
- Cresterea bacteriilor schimba culoarea VIOLET a rezasurinei in culoarea ROZ a resofurinei si/sau INCOLOR pentru dihydroresofurina.
- Interpretarea rezultatului se face prin schimbarea culorii de fond intr-o alta culoare.

# SIMPLATE®

## Procedura de lucru:

### Varianta 1: Teste multiple



Se transfera mediu deshidratat  
aferent placii SimPlate intr-un  
flacon cu 100 ml apa sterila.

Se agita bine pana la dizolvare



# SIMPLATE®

Se transfera 1ml de proba



Se adauga 9ml mediu hidratat



Se pot utiliza pipete sau multidispenser de 9ml.



# SIMPLATE®

Varianta obtionala cu dispenser  
de 9 ml



Se transfera mediului aferet SimPlate, intr-un dispenser de 100 ml steril.



Se agita pana la dizolvare.

# SIMPLATE®

Se inoculeaza placa Simplate  
utilizand un dispenser de 9  
ml astfel:

Se pipeteaza 1 ml de proba pe  
SimPlate.

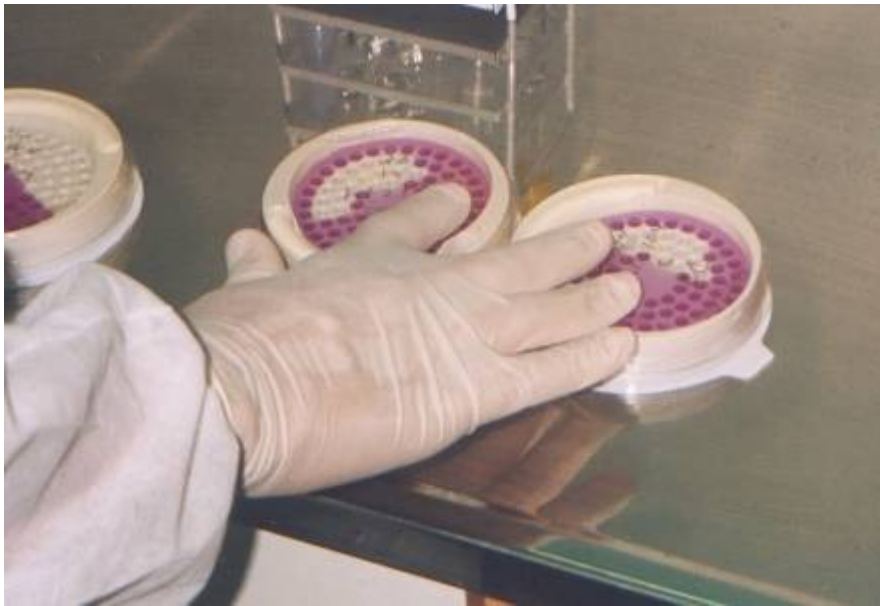


Se transfera 9 ml de mediu preparat pe SimPlate.

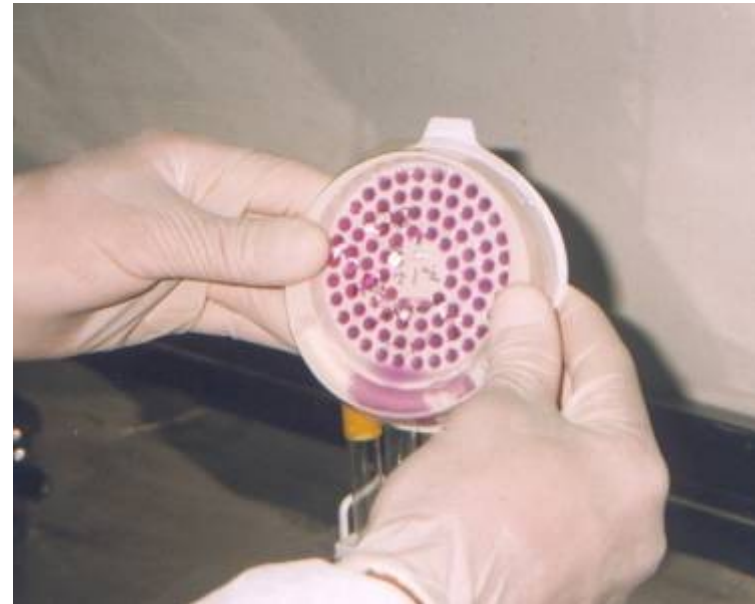


# SIMPLATE<sup>®</sup>

## *Pregătirea plăcii Simplete:*



Cu miscari circulare se uniformizeaza lichidul in toate godeurile



Se elimina excesul la baza (tampon) SimPlate

# SIMPLATE®

## Incubare



TPC 24 ore. a 35 °C  
TPC-CI 24 ore. a 35 °C

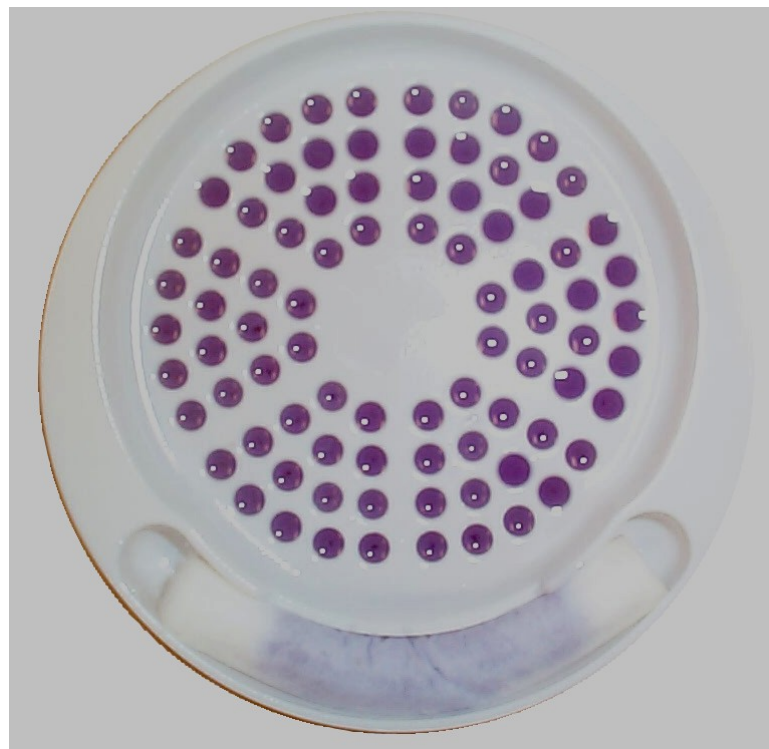
CEC 24 ore. a 35 °C  
CEC-CI 24 ore. a 35 °C

SYM 56-72 ore. a 30 °C  
SYM-CI 56-72 ore. a 30 °C

ENT-CI 24 ore. a 35 °C

# SIMPLATE<sup>®</sup>

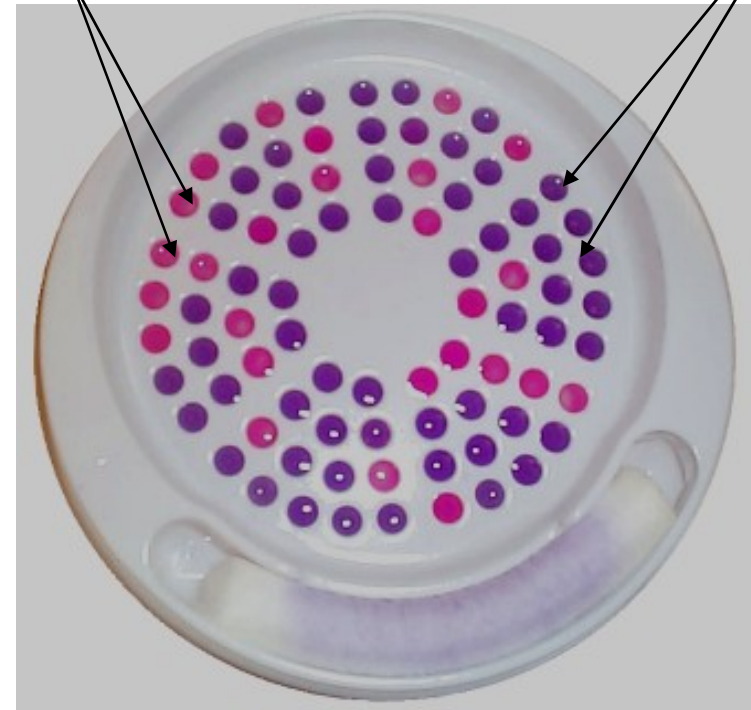
**Citirea rezultatelor pe SimPlate pentru Total  
numar de bacterii:**



Inainte de Incubare

Colonii Bacterii

Negativ



Dupa 24h de la incubare la  
35°C

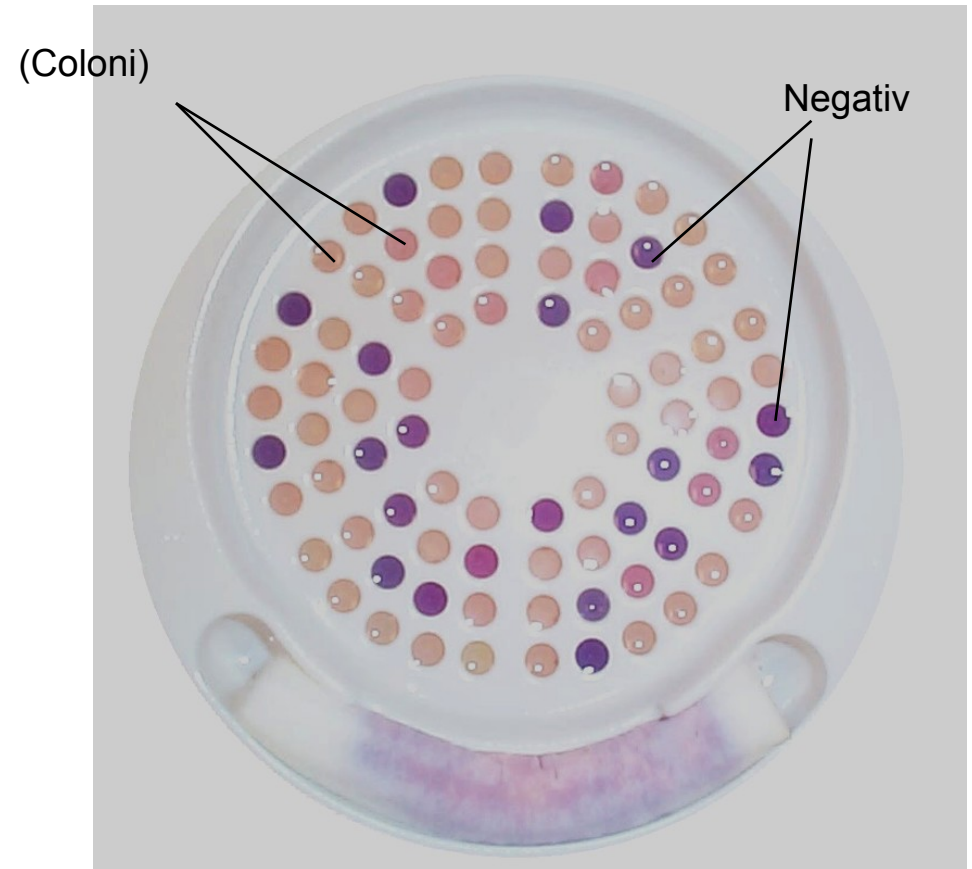


# SIMPLATE®

Rezultate pe SimPlate pentru Drojdi & Mucegaiuri:



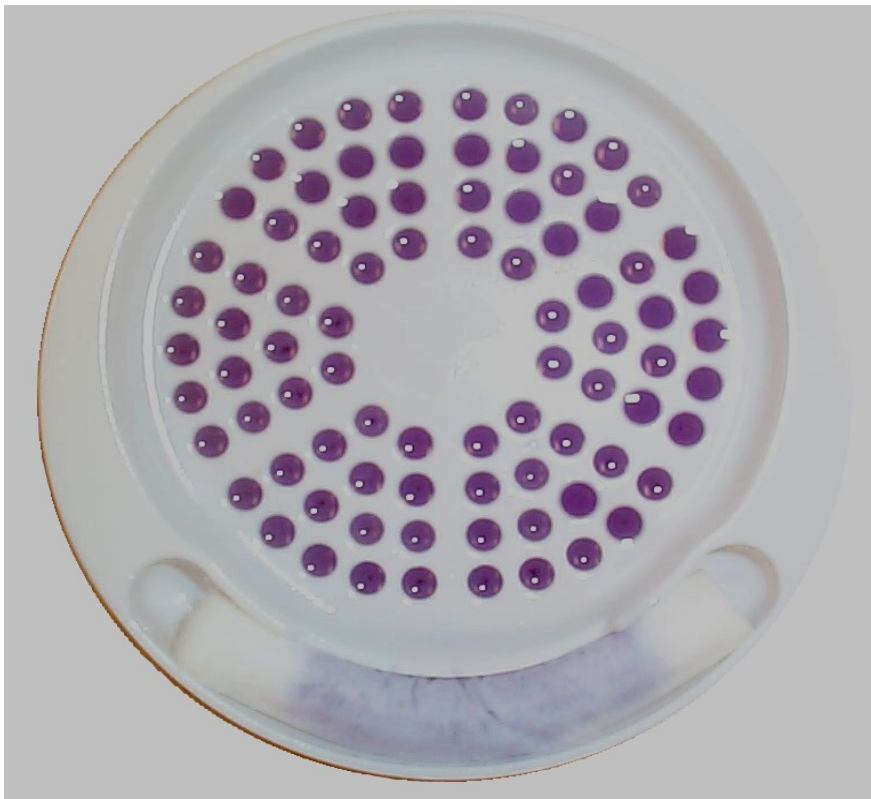
Inainte de Incubare



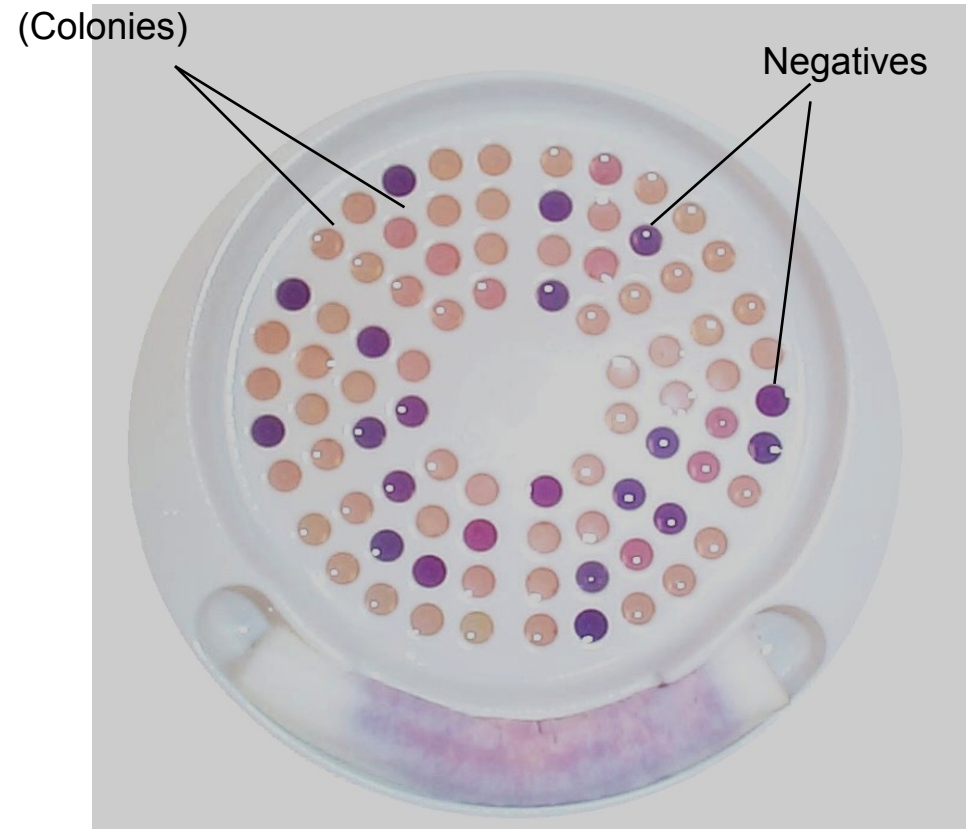
Dupa 48 – 72 ore de la incubare la 30°C

# SIMPLATE®

Rezultate pe SimPlate pentru Drojdi & Mucegaiuri:



Inainte de Incubare

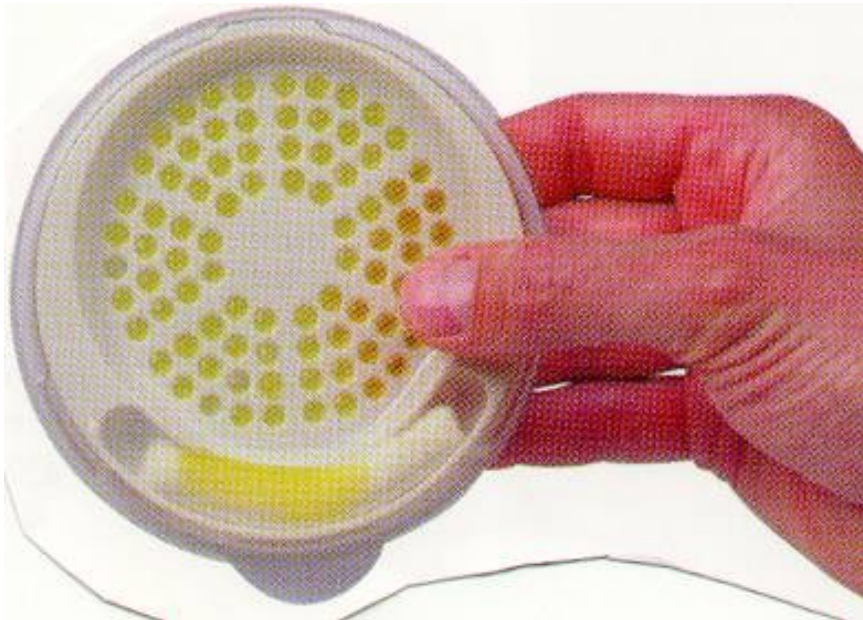


Dupa 48 – 72h de la incubare la 30°C

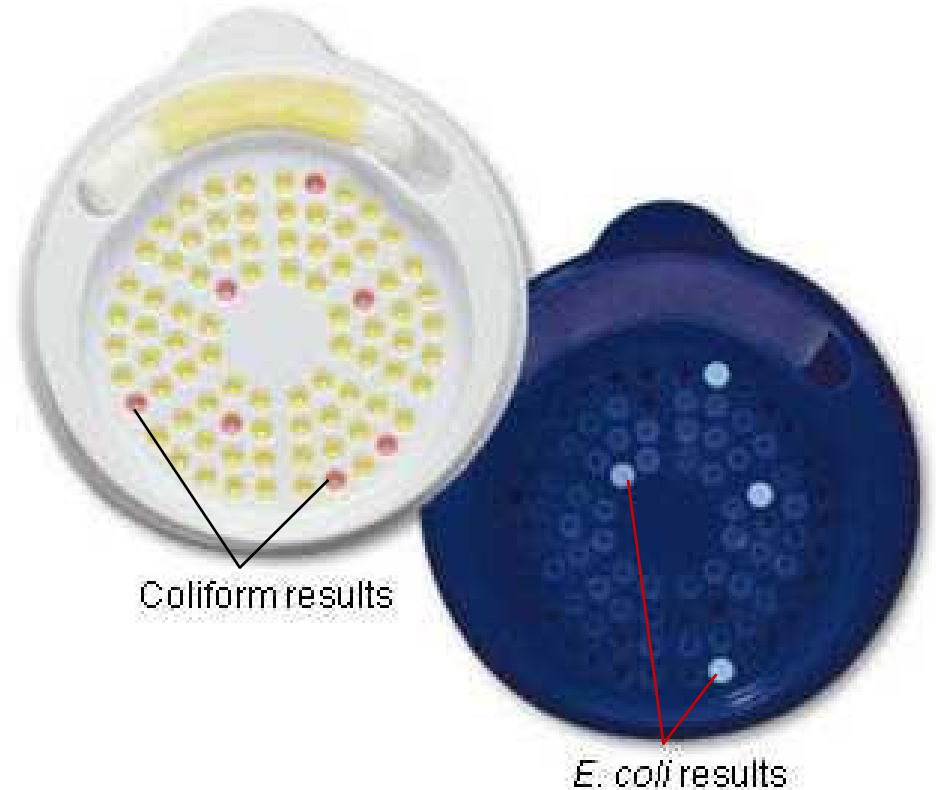


# SIMPLATE®

**Rezultatele pe SimPlate pentru  
Total Coliformi si E.Coli:**



**Inainte de Incubare**



**Dupa 24h de incubare la 35°C**

# SIMPLATE®

## Rezultatul final



14 Positiv

Tabelul de conversie:

14 celule pozitive = 30 UFC

Exemplu = 30 UFC/ml x dilution factor ( $10^2$ )

## 3000 UFC/ml

### SimPlate® NCR Conversion Table

If all wells are negative and the sponge is positive then conversion = < 2

| positive wells = population | positive wells = population | positive wells = population |
|-----------------------------|-----------------------------|-----------------------------|
| 1 = 2                       | 29 = 70                     | 57 = 190                    |
| 2 = 4                       | 30 = 74                     | 58 = 195                    |
| 3 = 6                       | 31 = 76                     | 59 = 202                    |
| 4 = 8                       | 32 = 80                     | 60 = 208                    |
| 5 = 10                      | 33 = 84                     | 61 = 216                    |
| 6 = 12                      | 34 = 86                     | 62 = 224                    |
| 7 = 14                      | 35 = 90                     | 63 = 232                    |
| 8 = 16                      | 36 = 94                     | 64 = 240                    |
| 9 = 18                      | 37 = 96                     | 65 = 248                    |
| 10 = 22                     | 38 = 100                    | 66 = 256                    |
| 11 = 24                     | 39 = 104                    | 67 = 266                    |
| 12 = 26                     | 40 = 108                    | 68 = 276                    |
| 13 = 28                     | 41 = 112                    | 69 = 288                    |
| <b>14 = 30</b>              | 42 = 116                    | 70 = 298                    |
| 15 = 32                     | 43 = 120                    | 71 = 312                    |
| 16 = 36                     | 44 = 124                    | 72 = 324                    |
| 17 = 38                     | 45 = 128                    | 73 = 338                    |
| 18 = 40                     | 46 = 132                    | 74 = 354                    |
| 19 = 42                     | 47 = 136                    | 75 = 372                    |
| 20 = 46                     | 48 = 142                    | 76 = 392                    |
| 21 = 48                     | 49 = 146                    | 77 = 414                    |
| 22 = 50                     | 50 = 150                    | 78 = 440                    |
| 23 = 54                     | 51 = 156                    | 79 = 470                    |
| 24 = 56                     | 52 = 160                    | 80 = 508                    |
| 25 = 58                     | 53 = 166                    | 81 = 556                    |
| 26 = 62                     | 54 = 172                    | 82 = 624                    |
| 27 = 64                     | 55 = 178                    | 83 = 738                    |
| 28 = 68                     | 56 = 184                    | 84 = >738                   |