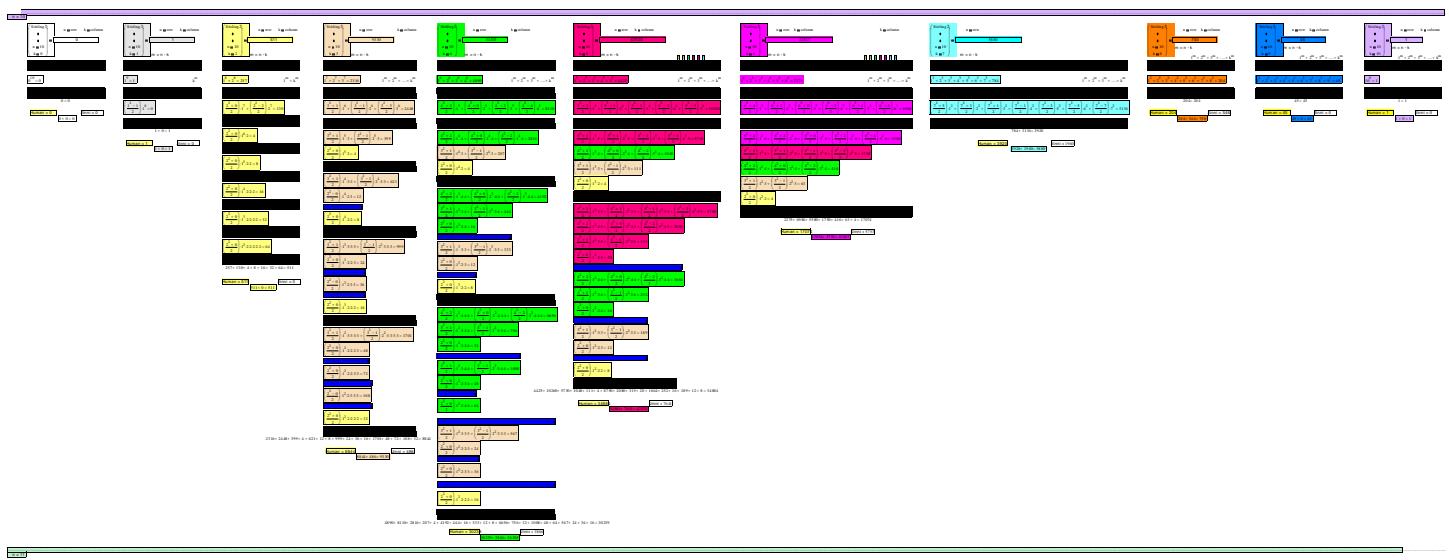


Stirling numbers of the 2th kind triangular **set of equation packages** array based on **Human and jinni algorithm Serajian Asl**





Below is a sample of sons set for showing the variable and invariable values in creating the sons set in a human package

$$\left(\frac{3^2+1}{2}\right) * \textcolor{magenta}{1^4} * \textcolor{yellow}{3} * \textcolor{cyan}{3} + \left(\frac{3^2-1}{2}\right) * \textcolor{magenta}{2^4} * \textcolor{yellow}{3} * \textcolor{cyan}{3} = 621$$

$$\left(\frac{2^2 - 0}{2}\right) * \textcolor{magenta}{1}^{\textcolor{blue}{4}} * \textcolor{yellow}{2} * \textcolor{cyan}{3} = 12$$

And below is a sample of a term in jinni's equation

Base numbers in numerator {invariable}

The diagram illustrates the derivation of the formula for the sum of the first n terms of a geometric sequence. It starts with the equation:

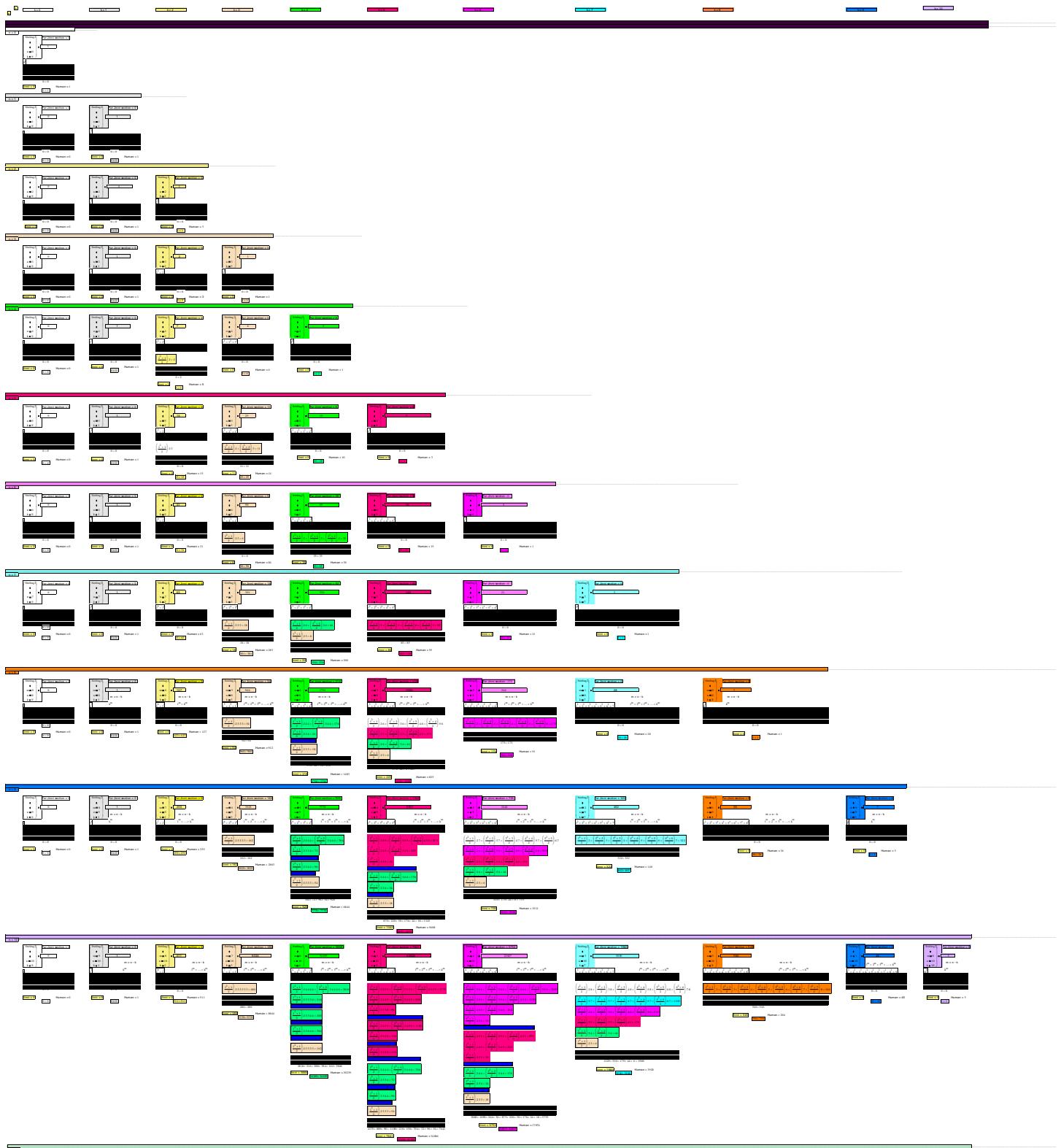
$$\left(\frac{3^2 + 3}{2}\right) * 4 * 5 * 5 * 5 * 5 * 5$$

Annotations explain the components:

- A yellow box labeled "Coefficients between the first and the last coefficients {variable}" covers the middle five terms ($4 * 5 * 5 * 5 * 5$).
- A pink box labeled "First coefficient (invariable)" covers the term 4 .
- A cyan box labeled "Last coefficient as identity of equation (invariable)" covers the term 5 .

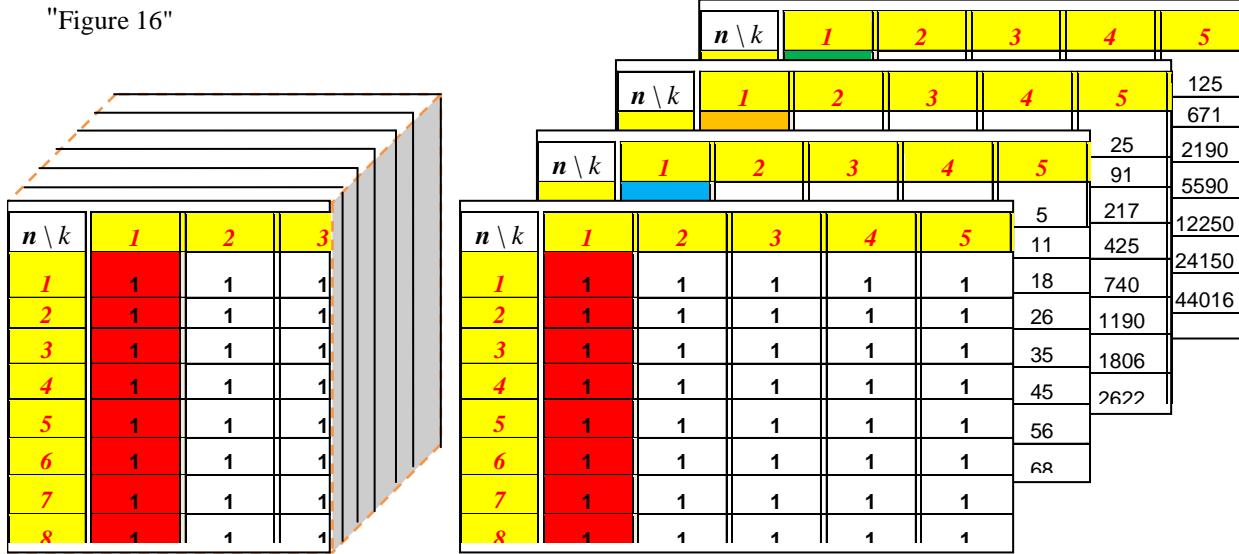
Stirling numbers of the second kind triangular **set of equation packages** array

Based on family tree of the **Jinni** and Human algorithm Serajian Asl



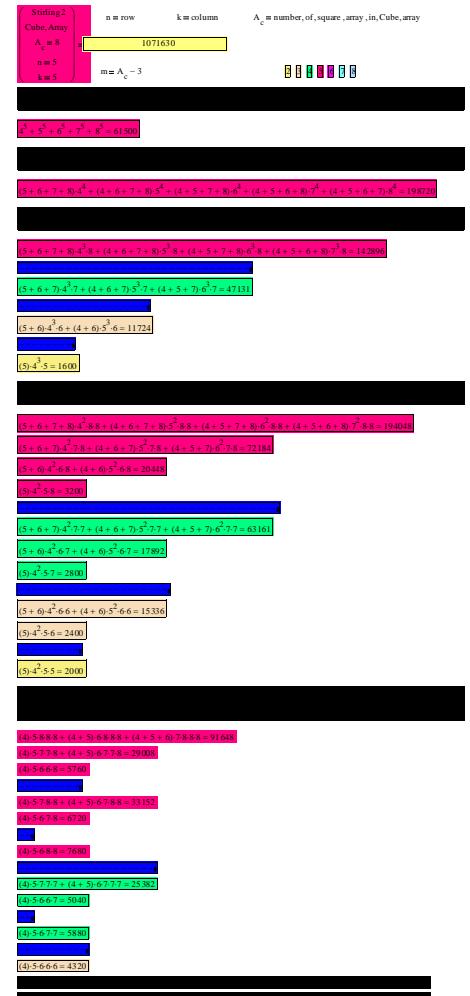
Set of the above made squared arrays makes a three – dimensional "3D numerical array"
In the name **numerical cube array**

"Figure 16"



Numerical cube set of the squared arrays make three dimensional **numerical cube array**

By adding {3} to each one of base numbers, the 4th term of sequence will be obtain {42525 ,156660 ,447195 ,1071630 ,..}



4425 + 10260 + 5730 + 1048 + 111 + 4 + 8750 + 2080 + 315 + 20 + 1664 + 252 = 34659

16 + 189 + 12 + 8 + 4375 + 180 + 90 + 110 + 120 + 150 + 704 + 72 + 96 + 54 = 7866

14650 + 7866 + 37523

2800 + 15336 + 2400 + 2000 + 91648 + 29008 + 5760 + 33152 + 6720 + 7680 + 25382 + 5040 + 5880 + 4320 = 237126

61500 + 198720 + 142896 + 47131 + 11724 + 1600 + 194048 + 72184 + 20448 + 3200 + 63161 + 17892 + 834504

133504 + 217126 + 671630