

Diagram for the computation by the Engine of the Numbers of Bernoulli. See Note G. (page 722 et seq.)

Result Variables.

	Nature of Operation.	Variables acted upon.	Variables receiving results.	Indication of change in the value on any Variable.	Statement of Results.	1V ₁ 0 0 0 1	1V ₂ O 0 0 2	1V ₃ O 0 0 4	°V₄ ○ 0 0 0	°V₅ ○ 0 0 0	°V° ○ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	°V ₇ O 0 0 0	ev.s ○ 0 0 0 0	°V,	°V ₁₀ ○ 0 0 0 0 0	**V ₁₁	°V ₁₂ ○ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	°V ₁₃ ○ 0 0 0	B ₁ in a decimal O fraction.	B ₃ in a decimal O A fraction.	B _s in a decimal ○ B fraction.	°V ₂₁ ○ 0 0 0 0 B ₇
1 2 3 4 5 6 7	- + + +	$V_4 = {}^{1}V_1$ $V_5 + {}^{1}V_1$ $V_6 \div {}^{2}V_4$ $V_{11} \div {}^{1}V_2$ $V_{13} - {}^{2}V_{11}$ $V_3 = {}^{1}V_1$	1V ₁₀	$ \begin{bmatrix} 13 & -13 & -13 \\ 1V_4 & -2V_4 \\ 1V_1 & -1V_1 \\ 1V_5 & -2V_5 \\ 1V_1 & -1V_1 \end{bmatrix} \\ \{ 2V_5 & -9V_5 \\ 2V_4 & -9V_4 \\ 1V_1 & -2V_{11} \\ 1V_2 & -1V_2 \end{bmatrix} \\ \{ 2V_{11} & -9V_{11} \\ 0V_{13} & -1V_{33} \\ 1V_1 & -1V_1 \end{bmatrix} $			2 2	n	2 n 2 n - 1 0	2 n 2 n + 1 0	2 n				 n – 1	$ \begin{array}{c} 2n-1 \\ \hline 2n+1 \\ \hline 1 & 2n-1 \\ \hline 2 & 2n+1 \\ \hline 0 \end{array} $		$-\frac{1}{2}\cdot\frac{2n-1}{2n+1}=\Lambda_0$				
8 9 10 11 12	+ + + + + + + + + + + + + + + + + + +	$V_2 + {}^{0}V_7$ $V_6 + {}^{1}V_7$ $V_{21} \times {}^{3}V_{11}$ $V_{12} + {}^{1}V_{13}$ $V_{10} - {}^{1}V_1$	1V ₂ 3V ₁₁ 1V ₁₂ 2V ₁₃	$ \left\{ \begin{matrix} ^{1}V_{12} = ^{6}V_{12} \\ ^{1}V_{13} = ^{2}V_{13} \\ \end{matrix} \right\} $ $ \left\{ \begin{matrix} ^{1}V_{10} = ^{2}V_{10} \\ ^{1}V_{1} = ^{1}V_{1} \\ \end{matrix} \right\} $	$ \begin{aligned} & = 2 + 0 = 2 \\ & = \frac{2}{n} = A_1 \\ & = B_1 \cdot \frac{2}{2} = B_1 A_1 \\ & = -\frac{1}{2} \cdot \frac{2n - 1}{2n + 1} + B_1 \cdot \frac{2n}{2} \\ & = n - 2 (= 2) \end{aligned} $		2				 2n 	2 2			 		$B_1 \cdot \frac{2 \pi}{2} = B_1 \Lambda_1$	$\left\{-\frac{1}{2}, \frac{2n-1}{2n+1} + B_1, \frac{2n}{2}\right\}$	В1			
13 14 15 16 17 18 20 21 22 23 1		$^{2}V_{6} + ^{2}V_{7}$ $^{3}V_{8} \times ^{3}V_{11}$ $^{2}V_{6} - ^{1}V_{1}$ $^{3}V_{1} + ^{2}V_{7}$ $^{3}V_{6} + ^{3}V_{7}$ $^{3}V_{9} \times ^{4}V_{11}$ $^{3}V_{12} \times ^{5}V_{13}$ $^{2}V_{12} + ^{2}V_{13}$ $^{2}V_{12} - ^{2}V_{13}$	iV _s		$\begin{array}{c} 2n-1 \\ = 2+1 = 3 \\ \hline \begin{array}{c} 2n-1 \\ = 3 \\ \hline \end{array} \\ \begin{array}{c} 3 \\ = 1 \\ \end{array} \\ \begin{array}{c} 3 \\ = 2 \\ \end{array} \\ \begin{array}{c} 3 \\ = 3 \\ \end{array} \\ \begin{array}{c} 3 \\ = 3 \\ \end{array} \\ \begin{array}{c} 3 \\ = 2 \\ = 2 \\ \end{array} \\ \begin{array}{c} 3 \\ = 1 \\ \end{array} \\ \begin{array}{c} 3 \\ = 1 \\ \end{array} \\ \begin{array}{c} 3 \\ = 2 \\ \end{array} \\ \begin{array}{c} 4 \\ = 2 \\ \end{array} \\ \begin{array}{c} 4 \\ = 2 \\ \end{array} \\ \begin{array}{c} 2 \\ = 2 \\ \end{array} \\ \begin{array}{c} 2 \\ = 2 \\ \end{array} \\ \begin{array}{c} 3 \\ $						2 n - 1 2 n - 1 2 n - 2 2 n - 2 petition	4 4				$\begin{cases} \frac{2n}{2}, \frac{2n-1}{3} \\ \\ \frac{2n}{3}, \frac{2n-1}{3}, \frac{2n-2}{3} \\ \\ \\ 0 \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $	B ₂ A ₂	$\left\{ A_{2}+B_{1}A_{1}+B_{2}A_{3}^{\prime }\right\}$		Ba		
24 25	+	4V ₁₃ +6V ₂₄	1V ₂₄	$\begin{cases} {}^{1}V_{1} = {}^{1}V_{1} \\ {}^{1}V_{3} = {}^{1}V_{3} \\ {}^{5}V_{4} = {}^{6}V_{4} \end{cases}$	= B ₇ = n + 1 = 4 + 1 = 5		-	n+1			0	0							Plant			В,