DIRECT TABULAR

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OGOU OLANIRAN CYRIAQUE
KILIBO-BENIN

Direct Tabular

$\sum_{k=1}^{n} z_k = -\frac{a_{n-1}}{a_n}$
$\sum_{k=1}^{n} z_k^2 = -\frac{2a_{n-2}}{a_n} + \frac{a_{n-1}^2}{a_n^2}$
$\sum_{k=1}^{n} z_k^3 = -\frac{3a_{n-3}}{a_n} - \frac{a_{n-1}^3}{a_n^3} + \frac{3a_{n-1}a_{n-2}}{a_n^2}$
$\sum_{k=1}^{n} z_k^4 = -\frac{4a_{n-4}}{a_n} + \frac{2a_{n-2}^2}{a_n^2} + \frac{a_{n-1}^4}{a_n^4} + \frac{4a_{n-1}a_{n-3}}{a_n^2} - \frac{4a_{n-1}^2a_{n-2}}{a_n^3}$
$\sum_{k=1}^{n} z_k^5 = -\frac{5a_{n-5}}{a_n} - \frac{a_{n-1}^5}{a_n^5} + \frac{5a_{n-1}a_{n-4}}{a_n^2} + \frac{5a_{n-2}a_{n-3}}{a_n^2} - \frac{5a_{n-1}^2a_{n-3}}{a_n^3} - \frac{5a_{n-1}a_{n-2}^2}{a_n^3} + \frac{5a_{n-1}^3a_{n-2}}{a_n^4}$
$\sum_{k=1}^{n} z_k^6 = -\frac{6a_{n-6}}{a_n} + \frac{3a_{n-3}^2}{a_n^2} - \frac{2a_{n-2}^3}{a_n^3} + \frac{a_{n-1}^6}{a_n^6} + \frac{6a_{n-1}a_{n-5}}{a_n^2} + \frac{6a_{n-2}a_{n-4}}{a_n^2} - \frac{6a_{n-1}^2a_{n-4}}{a_n^3} + \frac{6a_{n-1}^3a_{n-3}}{a_n^4} - \frac{6a_{n-1}^4a_{n-2}}{a_n^5} + \frac{9a_{n-1}^2a_{n-2}^2}{a_n^4} - \frac{12a_{n-1}a_{n-2}a_{n-3}}{a_n^3}$
$\sum_{k=1}^{n} z_k^7 = -\frac{7a_{n-7}}{a_n} - \frac{a_{n-1}^7}{a_n^7} + \frac{7a_{n-1}a_{n-6}}{a_n^2} + \frac{7a_{n-2}a_{n-5}}{a_n^2} + \frac{7a_{n-3}a_{n-4}}{a_n^2} - \frac{7a_{n-1}^2a_{n-5}}{a_n^3} - \frac{7a_{n-1}a_{n-3}^2}{a_n^3} - \frac{7a_{n-2}^2a_{n-3}}{a_n^3} + \frac{7a_{n-1}^3a_{n-4}}{a_n^4} + \frac{7a_{n-1}a_{n-2}^3}{a_n^4} - \frac{7a_{n-1}^4a_{n-3}}{a_n^5} + \frac{7a_{n-1}^5a_{n-2}}{a_n^6} - \frac{14a_{n-1}^3a_{n-2}^2}{a_n^5} - \frac{14a_{n-1}a_{n-2}a_{n-4}}{a_n^3} + \frac{21a_{n-1}^2a_{n-2}a_{n-3}}{a_n^4}$
$\sum_{k=1}^{n} z_k^8 = -\frac{8a_{n-8}}{a_n} + \frac{4a_{n-4}^2}{a_n^2} + \frac{2a_{n-2}^4}{a_n^4} + \frac{a_{n-1}^8}{a_n^8} + \frac{8a_{n-1}a_{n-7}}{a_n^2} + \frac{8a_{n-2}a_{n-6}}{a_n^2} + \frac{8a_{n-3}a_{n-5}}{a_n^2} - \frac{8a_{n-1}^2a_{n-6}}{a_n^3} - \frac{8a_{n-2}a_{n-3}^2}{a_n^3} - \frac{8a_{n-2}^2a_{n-4}}{a_n^3} + \frac{8a_{n-1}^3a_{n-5}}{a_n^4} - \frac{8a_{n-1}^4a_{n-4}}{a_n^5} + \frac{8a_{n-1}^5a_{n-3}}{a_n^6} - \frac{8a_{n-1}^6a_{n-2}}{a_n^7} + \frac{12a_{n-1}^2a_{n-3}^2}{a_n^4} - \frac{16a_{n-1}^2a_{n-2}^3}{a_n^5} + \frac{20a_{n-1}^4a_{n-2}^2}{a_n^6} - \frac{16a_{n-1}a_{n-3}a_{n-4}}{a_n^3} - \frac{16a_{n-1}a_{n-2}a_{n-5}}{a_n^3} + \frac{24a_{n-1}^2a_{n-2}a_{n-4}}{a_n^4} + \frac{24a_{n-1}a_{n-2}^2a_{n-3}}{a_n^4} - \frac{32a_{n-1}^3a_{n-2}a_{n-3}}{a_n^5}$

$$\sum_{k=1}^{n} z_k^9 = -\frac{9a_{n-9}}{a_n} - \frac{3a_{n-3}^3}{a_n^3} - \frac{a_{n-1}^9}{a_n^9} + \frac{9a_{n-1}a_{n-8}}{a_n^2} + \frac{9a_{n-2}a_{n-7}}{a_n^2} + \frac{9a_{n-3}a_{n-6}}{a_n^2} + \frac{9a_{n-4}a_{n-5}}{a_n^2} - \frac{9a_{n-1}^2a_{n-7}}{a_n^3} - \frac{9a_{n-1}a_{n-4}^2}{a_n^3} - \frac{9a_{n-2}^2a_{n-5}}{a_n^3} + \frac{9a_{n-1}^3a_{n-6}}{a_n^4} + \frac{9a_{n-2}^3a_{n-3}}{a_n^4} - \frac{9a_{n-1}^4a_{n-5}}{a_n^5} - \frac{9a_{n-1}a_{n-2}^4}{a_n^5} + \frac{9a_{n-1}^5a_{n-4}}{a_n^6} - \frac{9a_{n-1}^6a_{n-3}}{a_n^7} + \frac{9a_{n-1}^7a_{n-2}}{a_n^8} - \frac{18a_{n-1}^3a_{n-3}^2}{a_n^5} - \frac{27a_{n-1}^5a_{n-2}^2}{a_n^7} + \frac{30a_{n-1}^3a_{n-2}^3}{a_n^6} - \frac{18a_{n-1}a_{n-2}a_{n-6}}{a_n^3} - \frac{18a_{n-1}a_{n-3}a_{n-5}}{a_n^3} - \frac{18a_{n-2}a_{n-3}a_{n-4}}{a_n^3} + \frac{27a_{n-1}^2a_{n-3}a_{n-4}}{a_n^4} + \frac{27a_{n-1}^2a_{n-2}a_{n-5}}{a_n^4} + \frac{27a_{n-1}a_{n-2}^2a_{n-4}}{a_n^4} + \frac{27a_{n-1}a_{n-2}a_{n-3}^2}{a_n^4} - \frac{36a_{n-1}^3a_{n-2}a_{n-4}}{a_n^5} + \frac{45a_{n-1}^4a_{n-2}a_{n-3}}{a_n^6} - \frac{54a_{n-1}^2a_{n-2}^2a_{n-3}}{a_n^5}$$

$$\sum_{k=1}^{n} z_k^{10} = -\frac{10a_{n-10}}{a_n} + \frac{5a_{n-5}^2}{a_n^2} - \frac{2a_{n-2}^5}{a_n^5} + \frac{a_{n-1}^{10}}{a_n^{10}} + \frac{10a_{n-1}a_{n-9}}{a_n^2} + \frac{10a_{n-2}a_{n-8}}{a_n^2} + \frac{10a_{n-3}a_{n-7}}{a_n^2} + \frac{10a_{n-4}a_{n-6}}{a_n^2} - \frac{10a_{n-1}^2a_{n-8}}{a_n^3} - \frac{10a_{n-2}a_{n-4}^2}{a_n^3} - \frac{10a_{n-2}^2a_{n-6}}{a_n^3} - \frac{10a_{n-3}^2a_{n-4}}{a_n^3} + \frac{10a_{n-1}^3a_{n-7}}{a_n^4} + \frac{10a_{n-1}a_{n-3}^3}{a_n^4} + \frac{10a_{n-2}^3a_{n-4}}{a_n^4} - \frac{10a_{n-1}^4a_{n-6}}{a_n^5} + \frac{10a_{n-1}^5a_{n-5}}{a_n^6} - \frac{10a_{n-1}^6a_{n-4}}{a_n^7} + \frac{10a_{n-1}^7a_{n-3}}{a_n^8} - \frac{10a_{n-1}^8a_{n-2}}{a_n^9} + \frac{15a_{n-2}^2a_{n-3}^2}{a_n^4} + \frac{15a_{n-1}^2a_{n-4}^2}{a_n^4} + \frac{25a_{n-1}^2a_{n-2}^4}{a_n^6} + \frac{25a_{n-1}^4a_{n-3}^2}{a_n^6} + \frac{35a_{n-1}^6a_{n-2}^2}{a_n^8} - \frac{50a_{n-1}^4a_{n-2}^3}{a_n^7} - \frac{20a_{n-1}a_{n-2}a_{n-7}}{a_n^3} - \frac{20a_{n-1}a_{n-3}a_{n-6}}{a_n^3} - \frac{20a_{n-1}a_{n-4}a_{n-5}}{a_n^3} - \frac{20a_{n-2}a_{n-3}a_{n-5}}{a_n^3} + \frac{30a_{n-1}^2a_{n-3}a_{n-5}}{a_n^4} + \frac{30a_{n-1}^2a_{n-2}a_{n-6}}{a_n^4} + \frac{30a_{n-1}a_{n-2}^2a_{n-5}}{a_n^4} - \frac{40a_{n-1}^3a_{n-2}a_{n-5}}{a_n^5} - \frac{40a_{n-1}^3a_{n-3}a_{n-4}}{a_n^5} - \frac{40a_{n-1}a_{n-2}^3a_{n-3}}{a_n^5} + \frac{50a_{n-1}^4a_{n-2}a_{n-4}}{a_n^6} - \frac{60a_{n-1}^5a_{n-2}a_{n-3}}{a_n^7} - \frac{60a_{n-1}^2a_{n-2}^2a_{n-4}}{a_n^5} - \frac{60a_{n-1}^2a_{n-2}a_{n-3}^2}{a_n^5} + \frac{100a_{n-1}^3a_{n-2}^2a_{n-3}}{a_n^6} + \frac{60a_{n-1}a_{n-2}a_{n-3}a_{n-4}}{a_n^4}$$

$$\sum_{k=1}^{n} z_k^{11} = -\frac{11a_{n-11}}{a_n} - \frac{a_{n-1}^{11}}{a_n^{11}} + \frac{11a_{n-1}a_{n-10}}{a_n^2} + \frac{11a_{n-2}a_{n-9}}{a_n^2} + \frac{11a_{n-3}a_{n-8}}{a_n^2} + \frac{11a_{n-4}a_{n-7}}{a_n^2} + \frac{11a_{n-5}a_{n-6}}{a_n^2} - \frac{11a_{n-1}^2a_{n-9}}{a_n^3} - \frac{11a_{n-1}a_{n-5}^2}{a_n^3} - \frac{11a_{n-3}a_{n-4}^2}{a_n^3} - \frac{11a_{n-2}^2a_{n-7}}{a_n^3} - \frac{11a_{n-3}^2a_{n-5}}{a_n^3} + \frac{11a_{n-1}^3a_{n-8}}{a_n^4} + \frac{11a_{n-2}a_{n-3}^3}{a_n^4} + \frac{11a_{n-2}^3a_{n-5}}{a_n^4} - \frac{11a_{n-1}^4a_{n-7}}{a_n^5} - \frac{11a_{n-2}^4a_{n-3}}{a_n^5} + \frac{11a_{n-1}^5a_{n-6}}{a_n^6} + \frac{11a_{n-1}a_{n-2}^5}{a_n^6} - \frac{11a_{n-1}^6a_{n-5}}{a_n^7} + \frac{11a_{n-1}^7a_{n-4}}{a_n^8} - \frac{11a_{n-1}^8a_{n-3}}{a_n^9} + \frac{11a_{n-1}^9a_{n-2}}{a_n^{10}} - \frac{22a_{n-1}^2a_{n-3}^3}{a_n^5} - \frac{22a_{n-1}^3a_{n-2}^2}{a_n^5} - \frac{33a_{n-1}^5a_{n-3}^2}{a_n^7} - \frac{44a_{n-1}^7a_{n-2}^2}{a_n^9} - \frac{55a_{n-1}^3a_{n-2}^4}{a_n^7} + \frac{77a_{n-1}^5a_{n-2}^3}{a_n^8} - \frac{22a_{n-1}a_{n-2}a_{n-8}}{a_n^3} - \frac{22a_{n-1}a_{n-3}a_{n-7}}{a_n^3} - \frac{22a_{n-1}a_{n-4}a_{n-6}}{a_n^3} - \frac{22a_{n-2}a_{n-3}a_{n-6}}{a_n^3} - \frac{22a_{n-2}a_{n-4}a_{n-5}}{a_n^3} + \frac{33a_{n-1}^2a_{n-2}a_{n-7}}{a_n^4} + \frac{33a_{n-1}^2a_{n-3}a_{n-6}}{a_n^4} + \frac{33a_{n-1}^2a_{n-4}a_{n-5}}{a_n^4} + \frac{33a_{n-2}^2a_{n-3}a_{n-4}}{a_n^4} + \frac{33a_{n-1}a_{n-2}^2a_{n-6}}{a_n^4} + \frac{33a_{n-1}a_{n-3}^2a_{n-4}}{a_n^4} + \frac{33a_{n-1}a_{n-2}a_{n-4}^2}{a_n^4} - \frac{44a_{n-1}^3a_{n-2}a_{n-6}}{a_n^5} - \frac{44a_{n-1}^3a_{n-3}a_{n-5}}{a_n^5} - \frac{44a_{n-1}^3a_{n-4}^2}{a_n^5} - \frac{44a_{n-1}^4a_{n-2}a_{n-5}}{a_n^6} - \frac{44a_{n-1}^4a_{n-3}a_{n-4}}{a_n^6} - \frac{44a_{n-1}a_{n-2}^3a_{n-5}}{a_n^6} - \frac{44a_{n-1}a_{n-2}^2a_{n-3}^2}{a_n^6} + \frac{44a_{n-1}^5a_{n-2}a_{n-4}}{a_n^7} + \frac{44a_{n-1}^5a_{n-3}^2}{a_n^7} + \frac{44a_{n-1}^6a_{n-2}a_{n-3}}{a_n^8} + \frac{44a_{n-1}^2a_{n-2}a_{n-3}a_{n-4}}{a_n^5}$$

$$\frac{44a_{n-1}^3a_{n-3}a_{n-5}}{a_n^5}-\frac{44a_{n-1}a_{n-2}^3a_{n-4}}{a_n^5}+\frac{55a_{n-1}^4a_{n-2}a_{n-5}}{a_n^6}+\frac{55a_{n-1}^4a_{n-3}a_{n-4}}{a_n^6}-\frac{66a_{n-1}^5a_{n-2}a_{n-4}}{a_n^7}+\frac{77a_{n-1}^6a_{n-2}a_{n-3}}{a_n^8}-\frac{66a_{n-1}^2a_{n-2}^2a_{n-5}}{a_n^5}-\frac{66a_{n-1}a_{n-2}^2a_{n-3}^2}{a_n^5}+\frac{110a_{n-1}^3a_{n-2}^2a_{n-4}}{a_n^6}+\frac{110a_{n-1}^3a_{n-2}a_{n-3}^2}{a_n^6}+\frac{110a_{n-1}^2a_{n-2}^3a_{n-3}}{a_n^6}-\frac{165a_{n-1}^4a_{n-2}^2a_{n-3}}{a_n^7}+\frac{66a_{n-1}a_{n-2}a_{n-3}a_{n-5}}{a_n^4}-\frac{132a_{n-1}^2a_{n-2}a_{n-3}a_{n-4}}{a_n^5}$$

$$\sum_{k=1}^{n}Z_k^{12}=-\frac{12a_{n-12}}{a_n}+\frac{6a_{n-6}^2}{a_n^2}-\frac{4a_{n-4}^3}{a_n^3}+\frac{3a_{n-3}^4}{a_n^4}+\frac{2a_{n-2}^6}{a_n^6}+\frac{a_{n-1}^{12}}{a_n^{12}}+\frac{12a_{n-1}a_{n-11}}{a_n^2}+\frac{12a_{n-2}a_{n-10}}{a_n^2}+\frac{12a_{n-3}a_{n-9}}{a_n^2}+\frac{12a_{n-4}a_{n-8}}{a_n^2}+\frac{12a_{n-5}a_{n-7}}{a_n^2}-\frac{12a_{n-1}^2a_{n-10}}{a_n^3}-\frac{12a_{n-2}a_{n-5}^2}{a_n^3}-\frac{12a_{n-2}^2a_{n-8}}{a_n^3}-\frac{12a_{n-3}^2a_{n-6}}{a_n^3}+\frac{12a_{n-1}^3a_{n-9}}{a_n^4}+\frac{12a_{n-2}^3a_{n-6}}{a_n^4}-\frac{12a_{n-1}^4a_{n-8}}{a_n^5}-\frac{12a_{n-2}^4a_{n-4}}{a_n^5}+\frac{12a_{n-1}^5a_{n-7}}{a_n^6}-\frac{12a_{n-1}^6a_{n-6}}{a_n^7}+\frac{12a_{n-1}^7a_{n-5}}{a_n^8}-\frac{12a_{n-1}^8a_{n-4}}{a_n^9}+\frac{12a_{n-1}^9a_{n-3}}{a_n^{10}}-\frac{12a_{n-1}^{10}a_{n-2}}{a_n^{11}}+\frac{18a_{n-1}^2a_{n-5}^2}{a_n^4}+\frac{18a_{n-2}^2a_{n-4}^2}{a_n^4}-\frac{24a_{n-2}^3a_{n-3}^2}{a_n^6}+\frac{40a_{n-1}^3a_{n-3}^3}{a_n^6}+\frac{30a_{n-1}^4a_{n-4}^2}{a_n^6}-\frac{36a_{n-1}^2a_{n-2}^5}{a_n^7}+\frac{42a_{n-1}^6a_{n-3}^2}{a_n^8}+\frac{54a_{n-1}^8a_{n-2}^2}{a_n^{10}}+\frac{105a_{n-1}^4a_{n-2}^4}{a_n^8}-\frac{112a_{n-1}^6a_{n-2}^3}{a_n^9}-\frac{24a_{n-1}a_{n-2}a_{n-9}}{a_n^3}-\frac{24a_{n-1}a_{n-3}a_{n-8}}{a_n^3}-\frac{24a_{n-1}a_{n-4}a_{n-7}}{a_n^3}-\frac{24a_{n-1}a_{n-5}a_{n-6}}{a_n^3}-\frac{24a_{n-2}a_{n-3}a_{n-7}}{a_n^3}-\frac{24a_{n-2}a_{n-4}a_{n-6}}{a_n^3}-\frac{24a_{n-3}a_{n-4}a_{n-5}}{a_n^3}+\frac{36a_{n-1}^2a_{n-2}a_{n-8}}{a_n^4}+\frac{36a_{n-1}^2a_{n-3}a_{n-7}}{a_n^4}+\frac{36a_{n-1}^2a_{n-4}a_{n-6}}{a_n^4}+\frac{36a_{n-2}^2a_{n-3}a_{n-5}}{a_n^4}+\frac{36a_{n-1}a_{n-2}^2a_{n-7}}{a_n^4}+\frac{36a_{n-2}a_{n-3}^2a_{n-4}}{a_n^4}+\frac{36a_{n-1}a_{n-3}^2a_{n-5}}{a_n^4}+\frac{36a_{n-1}a_{n-3}a_{n-4}^2}{a_n^4}-\frac{48a_{n-1}^3a_{n-2}a_{n-7}}{a_n^5}-\frac{48a_{n-1}^3a_{n-3}a_{n-6}}{a_n^5}-\frac{48a_{n-1}^3a_{n-4}a_{n-5}}{a_n^5}-\frac{48a_{n-1}a_{n-2}^3a_{n-5}}{a_n^5}-\frac{48a_{n-1}a_{n-2}a_{n-3}^3}{a_n^5}+\frac{60a_{n-1}^4a_{n-2}a_{n-6}}{a_n^6}+\frac{60a_{n-1}^4a_{n-3}a_{n-5}}{a_n^6}+\frac{60a_{n-1}a_{n-2}^4a_{n-3}}{a_n^6}-\frac{72a_{n-1}^5a_{n-2}a_{n-5}}{a_n^7}-\frac{72a_{n-1}^5a_{n-3}a_{n-4}}{a_n^7}+\frac{84a_{n-1}^6a_{n-2}a_{n-4}}{a_n^8}-\frac{96a_{n-1}^7a_{n-2}a_{n-3}}{a_n^9}-\frac{72a_{n-1}^2a_{n-2}^2a_{n-6}}{a_n^5}-\frac{72a_{n-1}^2a_{n-3}^2a_{n-4}}{a_n^5}-\frac{72a_{n-1}^2a_{n-2}a_{n-4}^2}{a_n^5}+\frac{180a_{n-1}^2a_{n-2}^2a_{n-3}^2}{a_n^6}+\frac{120a_{n-1}^3a_{n-2}^2a_{n-5}}{a_n^6}+\frac{120a_{n-1}^2a_{n-2}^3a_{n-4}}{a_n^6}-\frac{240a_{n-1}^3a_{n-2}^3a_{n-3}}{a_n^7}-\frac{180a_{n-1}^4a_{n-2}^2a_{n-4}}{a_n^7}-\frac{180a_{n-1}^4a_{n-2}a_{n-3}^2}{a_n^7}+\frac{252a_{n-1}^5a_{n-2}^2a_{n-3}}{a_n^8}+\frac{72a_{n-1}a_{n-2}a_{n-3}a_{n-6}}{a_n^4}+\frac{72a_{n-1}a_{n-2}a_{n-4}a_{n-5}}{a_n^4}-\frac{144a_{n-1}^2a_{n-2}a_{n-3}a_{n-5}}{a_n^5}-\frac{144a_{n-1}a_{n-2}^2a_{n-3}a_{n-4}}{a_n^5}+\frac{240a_{n-1}^3a_{n-2}a_{n-3}a_{n-4}}{a_n^6}$$

$$\sum_{k=1}^{n}Z_k^{13}=-\frac{13a_{n-13}}{a_n}-\frac{a_{n-1}^{13}}{a_n^{13}}+\frac{13a_{n-1}a_{n-12}}{a_n^2}+\frac{13a_{n-2}a_{n-11}}{a_n^2}+\frac{13a_{n-3}a_{n-10}}{a_n^2}+\frac{13a_{n-4}a_{n-9}}{a_n^2}+\frac{13a_{n-5}a_{n-8}}{a_n^2}+\frac{13a_{n-6}a_{n-7}}{a_n^2}-\frac{13a_{n-1}^2a_{n-11}}{a_n^3}-\frac{13a_{n-1}a_{n-6}^2}{a_n^3}-$$

$$\frac{13a_{n-3}a_{n-5}^2}{a_n^3}-\frac{13a_{n-2}^2a_{n-9}}{a_n^3}-\frac{13a_{n-3}^2a_{n-7}}{a_n^3}-\frac{13a_{n-4}^2a_{n-5}}{a_n^3}+\frac{13a_{n-1}^3a_{n-10}}{a_n^4}+$$
$$\frac{13a_{n-1}a_{n-4}^3}{a_n^4}+\frac{13a_{n-2}^3a_{n-7}}{a_n^4}+\frac{13a_{n-3}^3a_{n-4}}{a_n^4}-\frac{13a_{n-1}^4a_{n-9}}{a_n^5}-\frac{13a_{n-1}a_{n-3}^4}{a_n^5}-$$
$$\frac{13a_{n-2}^4a_{n-5}}{a_n^5}+\frac{13a_{n-1}^5a_{n-8}}{a_n^6}+\frac{13a_{n-2}^5a_{n-3}}{a_n^6}-\frac{13a_{n-1}^6a_{n-7}}{a_n^7}-\frac{13a_{n-1}a_{n-2}^6}{a_n^7}+$$
$$\frac{13a_{n-1}^7a_{n-6}}{a_n^8}-\frac{13a_{n-1}^8a_{n-5}}{a_n^9}+\frac{13a_{n-1}^9a_{n-4}}{a_n^{10}}-\frac{13a_{n-1}^{10}a_{n-3}}{a_n^{11}}+\frac{13a_{n-1}^{11}a_{n-2}}{a_n^{12}}-$$
$$\frac{26a_{n-1}^3a_{n-5}^2}{a_n^5}-\frac{26a_{n-2}^2a_{n-3}^3}{a_n^5}-\frac{39a_{n-1}^5a_{n-4}^2}{a_n^7}-\frac{52a_{n-1}^7a_{n-3}^2}{a_n^9}-\frac{65a_{n-1}^9a_{n-2}^2}{a_n^{11}}-$$
$$\frac{65a_{n-1}^4a_{n-3}^3}{a_n^7}+\frac{91a_{n-1}^3a_{n-2}^5}{a_n^8}+\frac{156a_{n-1}^7a_{n-2}^3}{a_n^{10}}-\frac{182a_{n-1}^5a_{n-2}^4}{a_n^9}-\frac{26a_{n-1}a_{n-2}a_{n-10}}{a_n^3}-$$
$$\frac{26a_{n-1}a_{n-3}a_{n-9}}{a_n^3}-\frac{26a_{n-1}a_{n-4}a_{n-8}}{a_n^3}-\frac{26a_{n-1}a_{n-5}a_{n-7}}{a_n^3}-\frac{26a_{n-2}a_{n-3}a_{n-8}}{a_n^3}-$$
$$\frac{26a_{n-2}a_{n-4}a_{n-7}}{a_n^3}-\frac{26a_{n-2}a_{n-5}a_{n-6}}{a_n^3}-\frac{26a_{n-3}a_{n-4}a_{n-6}}{a_n^3}+\frac{39a_{n-1}^2a_{n-2}a_{n-9}}{a_n^4}+$$
$$\frac{39a_{n-1}^2a_{n-3}a_{n-8}}{a_n^4}+\frac{39a_{n-1}^2a_{n-4}a_{n-7}}{a_n^4}+\frac{39a_{n-1}^2a_{n-5}a_{n-6}}{a_n^4}+\frac{39a_{n-1}a_{n-2}^2a_{n-8}}{a_n^4}+$$
$$\frac{39a_{n-1}a_{n-3}^2a_{n-6}}{a_n^4}+\frac{39a_{n-1}a_{n-2}a_{n-5}^2}{a_n^4}+\frac{39a_{n-2}^2a_{n-3}a_{n-6}}{a_n^4}+\frac{39a_{n-2}^2a_{n-4}a_{n-5}}{a_n^4}+$$
$$\frac{39a_{n-2}a_{n-3}^2a_{n-5}}{a_n^4}+\frac{39a_{n-2}a_{n-3}a_{n-4}^2}{a_n^4}-\frac{52a_{n-1}^3a_{n-2}a_{n-8}}{a_n^5}-\frac{52a_{n-1}^3a_{n-3}a_{n-7}}{a_n^5}-$$
$$\frac{52a_{n-1}^3a_{n-4}a_{n-6}}{a_n^5}-\frac{52a_{n-1}a_{n-2}^3a_{n-6}}{a_n^5}-\frac{52a_{n-2}^3a_{n-3}a_{n-4}}{a_n^5}+\frac{65a_{n-1}^4a_{n-2}a_{n-7}}{a_n^6}+$$
$$\frac{65a_{n-1}^4a_{n-3}a_{n-6}}{a_n^6}+\frac{65a_{n-1}^4a_{n-4}a_{n-5}}{a_n^6}+\frac{65a_{n-1}a_{n-2}^4a_{n-4}}{a_n^6}-\frac{78a_{n-1}^5a_{n-2}a_{n-6}}{a_n^7}-$$
$$\frac{78a_{n-1}^5a_{n-3}a_{n-5}}{a_n^7}+\frac{91a_{n-1}^6a_{n-2}a_{n-5}}{a_n^8}+\frac{91a_{n-1}^6a_{n-3}a_{n-4}}{a_n^8}-\frac{104a_{n-1}^7a_{n-2}a_{n-4}}{a_n^9}+$$
$$\frac{117a_{n-1}^8a_{n-2}a_{n-3}}{a_n^{10}}-\frac{78a_{n-1}^2a_{n-2}^2a_{n-7}}{a_n^5}-\frac{78a_{n-1}^2a_{n-3}^2a_{n-5}}{a_n^5}-\frac{78a_{n-1}^2a_{n-3}a_{n-4}^2}{a_n^5}-$$
$$\frac{78a_{n-1}a_{n-2}^2a_{n-4}^2}{a_n^5}+\frac{130a_{n-1}^3a_{n-2}^2a_{n-6}}{a_n^6}+\frac{130a_{n-1}^3a_{n-3}^2a_{n-4}}{a_n^6}+\frac{130a_{n-1}^3a_{n-2}a_{n-4}^2}{a_n^6}+$$
$$\frac{130a_{n-1}^2a_{n-2}^3a_{n-5}}{a_n^6}+\frac{130a_{n-1}a_{n-2}^3a_{n-3}^2}{a_n^6}+\frac{130a_{n-1}^2a_{n-2}a_{n-3}^3}{a_n^6}-\frac{195a_{n-1}^4a_{n-2}^2a_{n-5}}{a_n^7}-$$
$$\frac{195a_{n-1}^2a_{n-2}^4a_{n-3}}{a_n^7}+\frac{273a_{n-1}^5a_{n-2}^2a_{n-4}}{a_n^8}+\frac{273a_{n-1}^5a_{n-2}a_{n-3}^2}{a_n^8}-\frac{364a_{n-1}^6a_{n-2}^2a_{n-3}}{a_n^9}-$$
$$\frac{260a_{n-1}^3a_{n-2}^3a_{n-4}}{a_n^7}+\frac{455a_{n-1}^4a_{n-2}^3a_{n-3}}{a_n^8}-\frac{390a_{n-1}^3a_{n-2}^2a_{n-3}^2}{a_n^7}+\frac{78a_{n-1}a_{n-2}a_{n-3}a_{n-7}}{a_n^4}+$$
$$\frac{78a_{n-1}a_{n-2}a_{n-4}a_{n-6}}{a_n^4}+\frac{78a_{n-1}a_{n-3}a_{n-4}a_{n-5}}{a_n^4}-\frac{156a_{n-1}^2a_{n-2}a_{n-3}a_{n-6}}{a_n^5}-$$
$$\frac{156a_{n-1}^2a_{n-2}a_{n-4}a_{n-5}}{a_n^5}-\frac{156a_{n-1}a_{n-2}^2a_{n-3}a_{n-5}}{a_n^5}-\frac{156a_{n-1}a_{n-2}a_{n-3}^2a_{n-4}}{a_n^5}+$$
$$\frac{260a_{n-1}^3a_{n-2}a_{n-3}a_{n-5}}{a_n^6}-\frac{390a_{n-1}^4a_{n-2}a_{n-3}a_{n-4}}{a_n^7}+\frac{390a_{n-1}^2a_{n-2}^2a_{n-3}a_{n-4}}{a_n^6}$$

$$\sum_{k=1}^{n} z_k^{14} = -\frac{14a_{n-14}}{a_n} + \frac{7a_{n-7}^2}{a_n^2} - \frac{2a_{n-2}^7}{a_n^7} + \frac{a_{n-1}^{14}}{a_n^{14}} + \frac{14a_{n-1}a_{n-13}}{a_n^2} + \frac{14a_{n-2}a_{n-12}}{a_n^2} +$$
$$\frac{14a_{n-3}a_{n-11}}{a_n^2} + \frac{14a_{n-4}a_{n-10}}{a_n^2} + \frac{14a_{n-5}a_{n-9}}{a_n^2} + \frac{14a_{n-6}a_{n-8}}{a_n^2} - \frac{14a_{n-1}^2a_{n-12}}{a_n^3} -$$
$$\frac{14a_{n-2}a_{n-6}^2}{a_n^3} - \frac{14a_{n-4}a_{n-5}^2}{a_n^3} - \frac{14a_{n-2}^2a_{n-10}}{a_n^3} - \frac{14a_{n-3}^2a_{n-8}}{a_n^3} - \frac{14a_{n-4}^2a_{n-6}}{a_n^3} +$$
$$\frac{14a_{n-1}^3a_{n-11}}{a_n^4} + \frac{14a_{n-2}a_{n-4}^3}{a_n^4} + \frac{14a_{n-2}^3a_{n-8}}{a_n^4} + \frac{14a_{n-3}^3a_{n-5}}{a_n^4} - \frac{14a_{n-1}^4a_{n-10}}{a_n^5} -$$
$$\frac{14a_{n-2}a_{n-3}^4}{a_n^5} - \frac{14a_{n-2}^4a_{n-6}}{a_n^5} + \frac{14a_{n-1}^5a_{n-9}}{a_n^6} + \frac{14a_{n-2}^5a_{n-4}}{a_n^6} - \frac{14a_{n-1}^6a_{n-8}}{a_n^7} +$$
$$\frac{14a_{n-1}^7a_{n-7}}{a_n^8} - \frac{14a_{n-1}^8a_{n-6}}{a_n^9} + \frac{14a_{n-1}^9a_{n-5}}{a_n^{10}} - \frac{14a_{n-1}^{10}a_{n-4}}{a_n^{11}} + \frac{14a_{n-1}^{11}a_{n-3}}{a_n^{12}} -$$
$$\frac{14a_{n-1}^{12}a_{n-2}}{a_n^{13}} + \frac{21a_{n-1}^2a_{n-6}^2}{a_n^4} + \frac{21a_{n-2}^2a_{n-5}^2}{a_n^4} + \frac{21a_{n-3}^2a_{n-4}^2}{a_n^4} - \frac{28a_{n-1}^2a_{n-4}^3}{a_n^5} -$$
$$\frac{28a_{n-2}^3a_{n-4}^2}{a_n^5} + \frac{35a_{n-1}^4a_{n-5}^2}{a_n^6} + \frac{35a_{n-1}^2a_{n-3}^4}{a_n^6} + \frac{35a_{n-2}^4a_{n-3}^2}{a_n^6} + \frac{49a_{n-1}^2a_{n-2}^6}{a_n^8} +$$
$$\frac{49a_{n-1}^6a_{n-4}^2}{a_n^8} + \frac{63a_{n-1}^8a_{n-3}^2}{a_n^{10}} + \frac{77a_{n-1}^{10}a_{n-2}^2}{a_n^{12}} + \frac{98a_{n-1}^5a_{n-3}^3}{a_n^8} - \frac{210a_{n-1}^8a_{n-2}^3}{a_n^{11}} -$$
$$\frac{196a_{n-1}^4a_{n-2}^5}{a_n^9} + \frac{294a_{n-1}^6a_{n-2}^4}{a_n^{10}} - \frac{28a_{n-1}a_{n-2}a_{n-11}}{a_n^3} - \frac{28a_{n-1}a_{n-3}a_{n-10}}{a_n^3} -$$
$$\frac{28a_{n-1}a_{n-4}a_{n-9}}{a_n^3} - \frac{28a_{n-1}a_{n-5}a_{n-8}}{a_n^3} - \frac{28a_{n-1}a_{n-6}a_{n-7}}{a_n^3} - \frac{28a_{n-2}a_{n-3}a_{n-9}}{a_n^3} -$$
$$\frac{28a_{n-2}a_{n-4}a_{n-8}}{a_n^3} - \frac{28a_{n-2}a_{n-5}a_{n-7}}{a_n^3} - \frac{28a_{n-3}a_{n-4}a_{n-7}}{a_n^3} - \frac{28a_{n-3}a_{n-5}a_{n-6}}{a_n^3} +$$
$$\frac{42a_{n-1}^2a_{n-2}a_{n-10}}{a_n^4} + \frac{42a_{n-1}^2a_{n-3}a_{n-9}}{a_n^4} + \frac{42a_{n-1}^2a_{n-4}a_{n-8}}{a_n^4} + \frac{42a_{n-1}^2a_{n-5}a_{n-7}}{a_n^4} +$$
$$\frac{42a_{n-1}a_{n-3}a_{n-5}^2}{a_n^4} + \frac{42a_{n-1}a_{n-2}^2a_{n-9}}{a_n^4} + \frac{42a_{n-1}a_{n-3}^2a_{n-7}}{a_n^4} + \frac{42a_{n-1}a_{n-4}^2a_{n-5}}{a_n^4} +$$
$$\frac{42a_{n-2}^2a_{n-3}a_{n-7}}{a_n^4} + \frac{42a_{n-2}^2a_{n-4}a_{n-6}}{a_n^4} + \frac{42a_{n-2}a_{n-3}^2a_{n-6}}{a_n^4} - \frac{56a_{n-1}^3a_{n-2}a_{n-9}}{a_n^5} -$$
$$\frac{56a_{n-1}^3a_{n-3}a_{n-8}}{a_n^5} - \frac{56a_{n-1}^3a_{n-4}a_{n-7}}{a_n^5} - \frac{56a_{n-1}^3a_{n-5}a_{n-6}}{a_n^5} - \frac{56a_{n-1}a_{n-2}^3a_{n-7}}{a_n^5} -$$
$$\frac{56a_{n-1}a_{n-3}^3a_{n-4}}{a_n^5} - \frac{56a_{n-2}^3a_{n-3}a_{n-5}}{a_n^5} + \frac{70a_{n-1}^4a_{n-2}a_{n-8}}{a_n^6} + \frac{70a_{n-1}^4a_{n-3}a_{n-7}}{a_n^6} +$$
$$\frac{70a_{n-1}^4a_{n-4}a_{n-6}}{a_n^6} + \frac{70a_{n-1}a_{n-2}^4a_{n-5}}{a_n^6} - \frac{84a_{n-1}^5a_{n-2}a_{n-7}}{a_n^7} - \frac{84a_{n-1}^5a_{n-3}a_{n-6}}{a_n^7} -$$
$$\frac{84a_{n-1}^5a_{n-4}a_{n-5}}{a_n^7} - \frac{84a_{n-1}a_{n-2}^5a_{n-3}}{a_n^7} + \frac{98a_{n-1}^6a_{n-2}a_{n-6}}{a_n^8} + \frac{98a_{n-1}^6a_{n-3}a_{n-5}}{a_n^8} -$$
$$\frac{112a_{n-1}^7a_{n-2}a_{n-5}}{a_n^9} - \frac{112a_{n-1}^7a_{n-3}a_{n-4}}{a_n^9} + \frac{126a_{n-1}^8a_{n-2}a_{n-4}}{a_n^{10}} - \frac{140a_{n-1}^9a_{n-2}a_{n-3}}{a_n^{11}} -$$
$$\frac{84a_{n-1}^2a_{n-2}^2a_{n-8}}{a_n^5} - \frac{84a_{n-1}^2a_{n-3}^2a_{n-6}}{a_n^5} - \frac{84a_{n-1}^2a_{n-2}a_{n-5}^2}{a_n^5} - \frac{84a_{n-2}^2a_{n-3}^2a_{n-4}}{a_n^5} +$$
$$\frac{140a_{n-1}^3a_{n-2}^2a_{n-7}}{a_n^6} + \frac{140a_{n-1}^3a_{n-3}^2a_{n-5}}{a_n^6} + \frac{140a_{n-1}^3a_{n-3}a_{n-4}^2}{a_n^6} + \frac{140a_{n-1}^2a_{n-2}^3a_{n-6}}{a_n^6} +$$
$$\frac{140a_{n-1}a_{n-2}^2a_{n-3}^3}{a_n^6} - \frac{210a_{n-1}^4a_{n-2}^2a_{n-6}}{a_n^7} - \frac{210a_{n-1}^4a_{n-3}^2a_{n-4}}{a_n^7} - \frac{210a_{n-1}^4a_{n-2}a_{n-4}^2}{a_n^7} -$$
$$\frac{210a_{n-1}^2a_{n-2}^4a_{n-4}}{a_n^7} + \frac{294a_{n-1}^5a_{n-2}^2a_{n-5}}{a_n^8} - \frac{392a_{n-1}^6a_{n-2}^2a_{n-4}}{a_n^9} - \frac{392a_{n-1}^6a_{n-2}a_{n-3}^2}{a_n^9} +$$

$$\frac{504a_{n-1}^7a_{n-2}^2a_{n-3}}{a_n^{10}}-\frac{280a_{n-1}^3a_{n-2}^3a_{n-5}}{a_n^7}-\frac{280a_{n-1}^3a_{n-2}a_{n-3}^3}{a_n^7}+\frac{490a_{n-1}^4a_{n-2}^3a_{n-4}}{a_n^8}+$$
$$\frac{490a_{n-1}^3a_{n-2}^4a_{n-3}}{a_n^8}-\frac{784a_{n-1}^5a_{n-2}^3a_{n-3}}{a_n^9}+\frac{210a_{n-1}^2a_{n-2}^2a_{n-4}^2}{a_n^6}-\frac{420a_{n-1}^2a_{n-2}^3a_{n-3}^2}{a_n^7}+$$
$$\frac{735a_{n-1}^4a_{n-2}^2a_{n-3}^2}{a_n^8}+\frac{84a_{n-1}a_{n-2}a_{n-3}a_{n-8}}{a_n^4}+\frac{84a_{n-1}a_{n-2}a_{n-4}a_{n-7}}{a_n^4}+$$
$$\frac{84a_{n-1}a_{n-2}a_{n-5}a_{n-6}}{a_n^4}+\frac{84a_{n-1}a_{n-3}a_{n-4}a_{n-6}}{a_n^4}+\frac{84a_{n-2}a_{n-3}a_{n-4}a_{n-5}}{a_n^4}-$$
$$\frac{168a_{n-1}^2a_{n-2}a_{n-3}a_{n-7}}{a_n^5}-\frac{168a_{n-1}^2a_{n-2}a_{n-4}a_{n-6}}{a_n^5}-\frac{168a_{n-1}^2a_{n-3}a_{n-4}a_{n-5}}{a_n^5}-$$
$$\frac{168a_{n-1}a_{n-2}^2a_{n-3}a_{n-6}}{a_n^5}-\frac{168a_{n-1}a_{n-2}^2a_{n-4}a_{n-5}}{a_n^5}-\frac{168a_{n-1}a_{n-2}a_{n-3}^2a_{n-5}}{a_n^5}-$$
$$\frac{168a_{n-1}a_{n-2}a_{n-3}a_{n-4}^2}{a_n^5}+\frac{280a_{n-1}^3a_{n-2}a_{n-3}a_{n-6}}{a_n^6}+\frac{280a_{n-1}^3a_{n-2}a_{n-4}a_{n-5}}{a_n^6}+$$
$$\frac{280a_{n-1}a_{n-2}^3a_{n-3}a_{n-4}}{a_n^6}-\frac{420a_{n-1}^4a_{n-2}a_{n-3}a_{n-5}}{a_n^7}+\frac{588a_{n-1}^5a_{n-2}a_{n-3}a_{n-4}}{a_n^8}+$$
$$\frac{420a_{n-1}^2a_{n-2}^2a_{n-3}a_{n-5}}{a_n^6}+\frac{420a_{n-1}^2a_{n-2}a_{n-3}^2a_{n-4}}{a_n^6}-\frac{840a_{n-1}^3a_{n-2}^2a_{n-3}a_{n-4}}{a_n^7}$$

$$\sum_{k=1}^{n}z_k^{15}=-\frac{15a_{n-15}}{a_n}-\frac{5a_{n-5}^3}{a_n^3}-\frac{3a_{n-3}^5}{a_n^5}-\frac{a_{n-1}^{15}}{a_n^{15}}+\frac{15a_{n-1}a_{n-14}}{a_n^2}+\frac{15a_{n-2}a_{n-13}}{a_n^2}+$$
$$\frac{15a_{n-3}a_{n-12}}{a_n^2}+\frac{15a_{n-4}a_{n-11}}{a_n^2}+\frac{15a_{n-5}a_{n-10}}{a_n^2}+\frac{15a_{n-6}a_{n-9}}{a_n^2}+\frac{15a_{n-7}a_{n-8}}{a_n^2}-$$
$$\frac{15a_{n-1}^2a_{n-13}}{a_n^3}-\frac{15a_{n-1}a_{n-7}^2}{a_n^3}-\frac{15a_{n-3}a_{n-6}^2}{a_n^3}-\frac{15a_{n-2}^2a_{n-11}}{a_n^3}-\frac{15a_{n-3}^2a_{n-9}}{a_n^3}-$$
$$\frac{15a_{n-4}^2a_{n-7}}{a_n^3}+\frac{15a_{n-1}^3a_{n-12}}{a_n^4}+\frac{15a_{n-3}a_{n-4}^3}{a_n^4}+\frac{15a_{n-2}^3a_{n-9}}{a_n^4}+\frac{15a_{n-3}^3a_{n-6}}{a_n^4}-$$
$$\frac{15a_{n-1}^4a_{n-11}}{a_n^5}-\frac{15a_{n-2}^4a_{n-7}}{a_n^5}+\frac{15a_{n-1}^5a_{n-10}}{a_n^6}+\frac{15a_{n-2}^5a_{n-5}}{a_n^6}-\frac{15a_{n-1}^6a_{n-9}}{a_n^7}-$$
$$\frac{15a_{n-2}^6a_{n-3}}{a_n^7}+\frac{15a_{n-1}^7a_{n-8}}{a_n^8}+\frac{15a_{n-1}a_{n-2}^7}{a_n^8}-\frac{15a_{n-1}^8a_{n-7}}{a_n^9}+\frac{15a_{n-1}^9a_{n-6}}{a_n^{10}}-$$
$$\frac{15a_{n-1}^{10}a_{n-5}}{a_n^{11}}+\frac{15a_{n-1}^{11}a_{n-4}}{a_n^{12}}-\frac{15a_{n-1}^{12}a_{n-3}}{a_n^{13}}+\frac{15a_{n-1}^{13}a_{n-2}}{a_n^{14}}-\frac{30a_{n-1}^3a_{n-6}^2}{a_n^5}-$$
$$\frac{45a_{n-1}^5a_{n-5}^2}{a_n^7}-\frac{60a_{n-1}^7a_{n-4}^2}{a_n^9}-\frac{75a_{n-1}^9a_{n-3}^2}{a_n^{11}}-\frac{90a_{n-1}^{11}a_{n-2}^2}{a_n^{13}}+\frac{50a_{n-1}^3a_{n-4}^3}{a_n^6}+$$
$$\frac{50a_{n-2}^3a_{n-3}^3}{a_n^6}-\frac{75a_{n-1}^3a_{n-3}^4}{a_n^7}-\frac{140a_{n-1}^6a_{n-3}^3}{a_n^9}-\frac{140a_{n-1}^3a_{n-2}^6}{a_n^9}+\frac{275a_{n-1}^9a_{n-2}^3}{a_n^{12}}-$$
$$\frac{450a_{n-1}^7a_{n-2}^4}{a_n^{11}}+\frac{378a_{n-1}^5a_{n-2}^5}{a_n^{10}}-\frac{30a_{n-1}a_{n-2}a_{n-12}}{a_n^3}-\frac{30a_{n-1}a_{n-3}a_{n-11}}{a_n^3}-$$
$$\frac{30a_{n-1}a_{n-4}a_{n-10}}{a_n^3}-\frac{30a_{n-1}a_{n-5}a_{n-9}}{a_n^3}-\frac{30a_{n-1}a_{n-6}a_{n-8}}{a_n^3}-\frac{30a_{n-2}a_{n-3}a_{n-10}}{a_n^3}-$$
$$\frac{30a_{n-2}a_{n-4}a_{n-9}}{a_n^3}-\frac{30a_{n-2}a_{n-5}a_{n-8}}{a_n^3}-\frac{30a_{n-2}a_{n-6}a_{n-7}}{a_n^3}-\frac{30a_{n-3}a_{n-4}a_{n-8}}{a_n^3}-$$
$$\frac{30a_{n-3}a_{n-5}a_{n-7}}{a_n^3}-\frac{30a_{n-4}a_{n-5}a_{n-6}}{a_n^3}+\frac{45a_{n-1}^2a_{n-2}a_{n-11}}{a_n^4}+\frac{45a_{n-1}^2a_{n-3}a_{n-10}}{a_n^4}+$$
$$\frac{45a_{n-1}^2a_{n-4}a_{n-9}}{a_n^4}+\frac{45a_{n-1}^2a_{n-5}a_{n-8}}{a_n^4}+\frac{45a_{n-1}^2a_{n-6}a_{n-7}}{a_n^4}+\frac{45a_{n-1}a_{n-2}a_{n-6}^2}{a_n^4}+$$
$$\frac{45a_{n-1}a_{n-4}a_{n-5}^2}{a_n^4}+\frac{45a_{n-1}a_{n-2}^2a_{n-10}}{a_n^4}+\frac{45a_{n-1}a_{n-3}^2a_{n-8}}{a_n^4}+\frac{45a_{n-1}a_{n-4}^2a_{n-6}}{a_n^4}+$$

$$\frac{45a_{n-2}^2a_{n-3}a_{n-8}}{a_n^4}+\frac{45a_{n-2}^2a_{n-4}a_{n-7}}{a_n^4}+\frac{45a_{n-2}^2a_{n-5}a_{n-6}}{a_n^4}+\frac{45a_{n-2}a_{n-3}^2a_{n-7}}{a_n^4}+$$
$$\frac{45a_{n-3}^2a_{n-4}a_{n-5}}{a_n^4}+\frac{45a_{n-2}a_{n-4}^2a_{n-5}}{a_n^4}+\frac{45a_{n-2}a_{n-3}a_{n-5}^2}{a_n^4}-\frac{60a_{n-1}^3a_{n-2}a_{n-10}}{a_n^5}-$$
$$\frac{60a_{n-1}^3a_{n-3}a_{n-9}}{a_n^5}-\frac{60a_{n-1}^3a_{n-4}a_{n-8}}{a_n^5}-\frac{60a_{n-1}^3a_{n-5}a_{n-7}}{a_n^5}-\frac{60a_{n-1}a_{n-2}a_{n-4}^3}{a_n^5}-$$
$$\frac{60a_{n-1}a_{n-2}^3a_{n-8}}{a_n^5}-\frac{60a_{n-1}a_{n-3}^3a_{n-5}}{a_n^5}-\frac{60a_{n-2}^3a_{n-3}a_{n-6}}{a_n^5}-\frac{60a_{n-2}^3a_{n-4}a_{n-5}}{a_n^5}-$$
$$\frac{60a_{n-2}a_{n-3}^3a_{n-4}}{a_n^5}+\frac{75a_{n-1}^4a_{n-2}a_{n-9}}{a_n^6}+\frac{75a_{n-1}^4a_{n-3}a_{n-8}}{a_n^6}+\frac{75a_{n-1}^4a_{n-4}a_{n-7}}{a_n^6}+$$
$$\frac{75a_{n-1}^4a_{n-5}a_{n-6}}{a_n^6}+\frac{75a_{n-1}a_{n-2}a_{n-3}^4}{a_n^6}+\frac{75a_{n-1}a_{n-2}^4a_{n-6}}{a_n^6}+\frac{75a_{n-2}^4a_{n-3}a_{n-4}}{a_n^6}-$$
$$\frac{90a_{n-1}^5a_{n-2}a_{n-8}}{a_n^7}-\frac{90a_{n-1}^5a_{n-3}a_{n-7}}{a_n^7}-\frac{90a_{n-1}^5a_{n-4}a_{n-6}}{a_n^7}-\frac{90a_{n-1}a_{n-2}^5a_{n-4}}{a_n^7}+$$
$$\frac{105a_{n-1}^6a_{n-2}a_{n-7}}{a_n^8}+\frac{105a_{n-1}^6a_{n-3}a_{n-6}}{a_n^8}+\frac{105a_{n-1}^6a_{n-4}a_{n-5}}{a_n^8}-\frac{120a_{n-1}^7a_{n-2}a_{n-6}}{a_n^9}-$$
$$\frac{120a_{n-1}^7a_{n-3}a_{n-5}}{a_n^9}+\frac{135a_{n-1}^8a_{n-2}a_{n-5}}{a_n^{10}}+\frac{135a_{n-1}^8a_{n-3}a_{n-4}}{a_n^{10}}-\frac{150a_{n-1}^9a_{n-2}a_{n-4}}{a_n^{11}}+$$
$$\frac{165a_{n-1}^{10}a_{n-2}a_{n-3}}{a_n^{12}}-\frac{90a_{n-1}^2a_{n-2}^2a_{n-9}}{a_n^5}-\frac{90a_{n-1}^2a_{n-3}^2a_{n-7}}{a_n^5}-\frac{90a_{n-1}^2a_{n-4}^2a_{n-5}}{a_n^5}-$$
$$\frac{90a_{n-1}^2a_{n-3}a_{n-5}^2}{a_n^5}-\frac{90a_{n-1}a_{n-2}^2a_{n-5}^2}{a_n^5}-\frac{90a_{n-1}a_{n-3}^2a_{n-4}^2}{a_n^5}-\frac{90a_{n-2}^2a_{n-3}^2a_{n-5}}{a_n^5}-$$
$$\frac{90a_{n-2}^2a_{n-3}a_{n-4}^2}{a_n^5}+\frac{150a_{n-1}^3a_{n-2}^2a_{n-8}}{a_n^6}+\frac{150a_{n-1}^3a_{n-3}^2a_{n-6}}{a_n^6}+\frac{150a_{n-1}^3a_{n-2}a_{n-5}^2}{a_n^6}+$$
$$\frac{150a_{n-1}^2a_{n-2}^3a_{n-7}}{a_n^6}+\frac{150a_{n-1}^2a_{n-3}^3a_{n-4}}{a_n^6}+\frac{150a_{n-1}a_{n-2}^3a_{n-4}^2}{a_n^6}-\frac{225a_{n-1}^4a_{n-2}^2a_{n-7}}{a_n^7}-$$
$$\frac{225a_{n-1}^4a_{n-3}^2a_{n-5}}{a_n^7}-\frac{225a_{n-1}^4a_{n-3}a_{n-4}^2}{a_n^7}-\frac{225a_{n-1}^2a_{n-2}^4a_{n-5}}{a_n^7}-\frac{225a_{n-1}a_{n-2}^4a_{n-3}^2}{a_n^7}+$$
$$\frac{315a_{n-1}^5a_{n-2}^2a_{n-6}}{a_n^8}+\frac{315a_{n-1}^5a_{n-3}^2a_{n-4}}{a_n^8}+\frac{315a_{n-1}^5a_{n-2}a_{n-4}^2}{a_n^8}+\frac{315a_{n-1}^2a_{n-2}^5a_{n-3}}{a_n^8}-$$
$$\frac{420a_{n-1}^6a_{n-2}^2a_{n-5}}{a_n^9}+\frac{540a_{n-1}^7a_{n-2}^2a_{n-4}}{a_n^{10}}+\frac{540a_{n-1}^7a_{n-2}a_{n-3}^2}{a_n^{10}}-\frac{675a_{n-1}^8a_{n-2}^2a_{n-3}}{a_n^{11}}-$$
$$\frac{300a_{n-1}^3a_{n-2}^3a_{n-6}}{a_n^7}+\frac{525a_{n-1}^4a_{n-2}^3a_{n-5}}{a_n^8}+\frac{525a_{n-1}^4a_{n-2}a_{n-3}^3}{a_n^8}+\frac{525a_{n-1}^3a_{n-2}^4a_{n-4}}{a_n^8}-$$
$$\frac{840a_{n-1}^5a_{n-2}^3a_{n-4}}{a_n^9}+\frac{1260a_{n-1}^6a_{n-2}^3a_{n-3}}{a_n^{10}}-\frac{1050a_{n-1}^4a_{n-2}^4a_{n-3}}{a_n^9}-\frac{450a_{n-1}^3a_{n-2}^2a_{n-4}^2}{a_n^7}-$$
$$\frac{450a_{n-1}^2a_{n-2}^2a_{n-3}^3}{a_n^7}-\frac{1260a_{n-1}^5a_{n-2}^2a_{n-3}^2}{a_n^9}+\frac{1050a_{n-1}^3a_{n-2}^3a_{n-3}^2}{a_n^8}+\frac{90a_{n-1}a_{n-2}a_{n-3}a_{n-9}}{a_n^4}+$$
$$\frac{90a_{n-1}a_{n-2}a_{n-4}a_{n-8}}{a_n^4}+\frac{90a_{n-1}a_{n-2}a_{n-5}a_{n-7}}{a_n^4}+\frac{90a_{n-1}a_{n-3}a_{n-4}a_{n-7}}{a_n^4}+$$
$$\frac{90a_{n-1}a_{n-3}a_{n-5}a_{n-6}}{a_n^4}+\frac{90a_{n-2}a_{n-3}a_{n-4}a_{n-6}}{a_n^4}-\frac{180a_{n-1}^2a_{n-2}a_{n-3}a_{n-8}}{a_n^5}-$$
$$\frac{180a_{n-1}^2a_{n-2}a_{n-4}a_{n-7}}{a_n^5}-\frac{180a_{n-1}^2a_{n-2}a_{n-5}a_{n-6}}{a_n^5}-\frac{180a_{n-1}^2a_{n-3}a_{n-4}a_{n-6}}{a_n^5}-$$
$$\frac{180a_{n-1}a_{n-2}^2a_{n-3}a_{n-7}}{a_n^5}-\frac{180a_{n-1}a_{n-2}^2a_{n-4}a_{n-6}}{a_n^5}-\frac{180a_{n-1}a_{n-2}a_{n-3}^2a_{n-6}}{a_n^4}+$$
$$\frac{300a_{n-1}^3a_{n-2}a_{n-3}a_{n-7}}{a_n^6}+\frac{360a_{n-1}^3a_{n-2}a_{n-4}a_{n-6}}{a_n^6}+\frac{360a_{n-1}^3a_{n-3}a_{n-4}a_{n-5}}{a_n^6}+$$

$$\frac{300a_{n-1}a_{n-2}^3a_{n-3}a_{n-5}}{a_n^6}-\frac{450a_{n-1}^4a_{n-2}a_{n-3}a_{n-6}}{a_n^7}-\frac{450a_{n-1}^4a_{n-2}a_{n-4}a_{n-5}}{a_n^7}+\frac{630a_{n-1}^5a_{n-2}a_{n-3}a_{n-5}}{a_n^8}-\frac{840a_{n-1}^6a_{n-2}a_{n-3}a_{n-4}}{a_n^9}+\frac{450a_{n-1}^2a_{n-2}^2a_{n-3}a_{n-6}}{a_n^6}+\frac{450a_{n-1}^2a_{n-2}^2a_{n-4}a_{n-5}}{a_n^6}+\frac{450a_{n-1}^2a_{n-2}a_{n-3}^2a_{n-5}}{a_n^6}+\frac{450a_{n-1}^2a_{n-2}a_{n-3}a_{n-4}^2}{a_n^6}+\frac{450a_{n-1}a_{n-2}^2a_{n-3}^2a_{n-4}}{a_n^6}-\frac{900a_{n-1}^3a_{n-2}^2a_{n-3}a_{n-5}}{a_n^7}-\frac{900a_{n-1}^3a_{n-2}a_{n-3}^2a_{n-4}}{a_n^7}+\frac{900a_{n-1}^2a_{n-2}^3a_{n-3}a_{n-4}}{a_n^7}+\frac{1575a_{n-1}^4a_{n-2}^2a_{n-3}a_{n-4}}{a_n^8}-\frac{360a_{n-1}a_{n-2}a_{n-3}a_{n-4}a_{n-5}}{a_n^5}$$

$$\sum_{k=1}^{n}z_k^{16}=-\frac{16a_{n-16}}{a_n}+\frac{8a_{n-8}^2}{a_n^2}+\frac{4a_{n-4}^4}{a_n^4}+\frac{2a_{n-2}^8}{a_n^8}+\frac{a_{n-1}^{16}}{a_n^{16}}+\frac{16a_{n-1}a_{n-15}}{a_n^2}+\frac{16a_{n-2}a_{n-14}}{a_n^2}+\frac{16a_{n-3}a_{n-13}}{a_n^2}+\frac{16a_{n-4}a_{n-12}}{a_n^2}+\frac{16a_{n-5}a_{n-11}}{a_n^2}+\frac{16a_{n-6}a_{n-10}}{a_n^2}+\frac{16a_{n-7}a_{n-9}}{a_n^2}-\frac{16a_{n-1}^2a_{n-14}}{a_n^3}-\frac{16a_{n-4}a_{n-6}^2}{a_n^3}-\frac{16a_{n-2}^2a_{n-12}}{a_n^3}-\frac{16a_{n-3}^2a_{n-10}}{a_n^3}-\frac{16a_{n-4}^2a_{n-8}}{a_n^3}-\frac{16a_{n-5}^2a_{n-6}}{a_n^3}-\frac{16a_{n-2}a_{n-7}^2}{a_n^3}+\frac{16a_{n-1}^3a_{n-13}}{a_n^4}+\frac{16a_{n-1}a_{n-5}^3}{a_n^4}+\frac{16a_{n-2}^3a_{n-10}}{a_n^4}+\frac{16a_{n-3}^3a_{n-7}}{a_n^4}-\frac{16a_{n-1}^4a_{n-12}}{a_n^5}-\frac{16a_{n-2}^4a_{n-8}}{a_n^5}-\frac{16a_{n-3}^4a_{n-4}}{a_n^5}+\frac{16a_{n-1}^5a_{n-11}}{a_n^6}+\frac{16a_{n-1}a_{n-3}^5}{a_n^6}+\frac{16a_{n-2}^5a_{n-6}}{a_n^6}-\frac{16a_{n-1}^6a_{n-10}}{a_n^7}-\frac{16a_{n-2}^6a_{n-4}}{a_n^7}+\frac{16a_{n-1}^7a_{n-9}}{a_n^8}-\frac{16a_{n-1}^8a_{n-8}}{a_n^9}+\frac{16a_{n-1}^9a_{n-7}}{a_n^{10}}-\frac{16a_{n-1}^{10}a_{n-6}}{a_n^{11}}+\frac{16a_{n-1}^{11}a_{n-5}}{a_n^{12}}-\frac{16a_{n-1}^{12}a_{n-4}}{a_n^{13}}+\frac{16a_{n-1}^{13}a_{n-3}}{a_n^{14}}-\frac{16a_{n-1}^{14}a_{n-2}}{a_n^{15}}+\frac{24a_{n-1}^2a_{n-7}^2}{a_n^4}+\frac{24a_{n-2}^2a_{n-6}^2}{a_n^4}+\frac{24a_{n-3}^2a_{n-5}^2}{a_n^4}-\frac{32a_{n-2}^2a_{n-4}^3}{a_n^5}-\frac{32a_{n-2}^3a_{n-5}^2}{a_n^5}+\frac{40a_{n-1}^4a_{n-6}^2}{a_n^6}+\frac{40a_{n-2}^2a_{n-3}^4}{a_n^6}+\frac{40a_{n-2}^4a_{n-4}^2}{a_n^6}-\frac{48a_{n-2}^5a_{n-3}^2}{a_n^7}+\frac{56a_{n-1}^6a_{n-5}^2}{a_n^8}-\frac{64a_{n-1}^2a_{n-2}^7}{a_n^9}+\frac{72a_{n-1}^8a_{n-4}^2}{a_n^{10}}+\frac{88a_{n-1}^{10}a_{n-3}^2}{a_n^{12}}+\frac{104a_{n-1}^{12}a_{n-2}^2}{a_n^{14}}-\frac{80a_{n-1}^4a_{n-4}^3}{a_n^7}+\frac{192a_{n-1}^7a_{n-3}^3}{a_n^{10}}-\frac{352a_{n-1}^{10}a_{n-2}^3}{a_n^{13}}+\frac{140a_{n-1}^4a_{n-3}^4}{a_n^8}+\frac{336a_{n-1}^4a_{n-2}^6}{a_n^{10}}+\frac{660a_{n-1}^8a_{n-2}^4}{a_n^{12}}-\frac{672a_{n-1}^6a_{n-2}^5}{a_n^{11}}-\frac{32a_{n-1}a_{n-2}a_{n-13}}{a_n^3}-\frac{32a_{n-1}a_{n-3}a_{n-12}}{a_n^3}-\frac{32a_{n-1}a_{n-4}a_{n-11}}{a_n^3}-\frac{32a_{n-1}a_{n-5}a_{n-10}}{a_n^3}-\frac{32a_{n-1}a_{n-6}a_{n-9}}{a_n^3}-\frac{32a_{n-1}a_{n-7}a_{n-8}}{a_n^3}-\frac{32a_{n-2}a_{n-3}a_{n-11}}{a_n^3}-\frac{32a_{n-2}a_{n-4}a_{n-10}}{a_n^3}-\frac{32a_{n-2}a_{n-5}a_{n-9}}{a_n^3}-\frac{32a_{n-2}a_{n-6}a_{n-8}}{a_n^3}-\frac{32a_{n-3}a_{n-4}a_{n-9}}{a_n^3}-\frac{32a_{n-3}a_{n-5}a_{n-8}}{a_n^3}-\frac{32a_{n-3}a_{n-6}a_{n-7}}{a_n^3}-\frac{32a_{n-4}a_{n-5}a_{n-7}}{a_n^3}+\frac{48a_{n-1}^2a_{n-2}a_{n-12}}{a_n^4}+\frac{48a_{n-1}^2a_{n-3}a_{n-11}}{a_n^4}+\frac{48a_{n-1}^2a_{n-4}a_{n-10}}{a_n^4}+\frac{48a_{n-1}^2a_{n-5}a_{n-9}}{a_n^4}+\frac{48a_{n-1}^2a_{n-6}a_{n-8}}{a_n^4}+\frac{48a_{n-1}a_{n-3}a_{n-6}^2}{a_n^4}+\frac{48a_{n-1}a_{n-2}^2a_{n-11}}{a_n^4}+\frac{48a_{n-1}a_{n-3}^2a_{n-9}}{a_n^4}+\frac{48a_{n-1}a_{n-4}^2a_{n-7}}{a_n^4}+\frac{48a_{n-2}^2a_{n-3}a_{n-9}}{a_n^4}+\frac{48a_{n-2}^2a_{n-4}a_{n-8}}{a_n^4}+\frac{48a_{n-2}^2a_{n-5}a_{n-7}}{a_n^4}+\frac{48a_{n-2}a_{n-3}^2a_{n-8}}{a_n^4}+\frac{48a_{n-3}^2a_{n-4}a_{n-6}}{a_n^4}+\frac{48a_{n-2}a_{n-4}^2a_{n-6}}{a_n^4}+$$

$$\frac{48a_{n-3}a_{n-4}^2a_{n-5}}{a_n^4}+\frac{48a_{n-2}a_{n-4}a_{n-5}^2}{a_n^4}-\frac{64a_{n-1}^3a_{n-2}a_{n-11}}{a_n^5}-\frac{64a_{n-1}^3a_{n-3}a_{n-10}}{a_n^5}-$$
$$\frac{64a_{n-1}^3a_{n-4}a_{n-9}}{a_n^5}-\frac{64a_{n-1}^3a_{n-5}a_{n-8}}{a_n^5}-\frac{64a_{n-1}^3a_{n-6}a_{n-7}}{a_n^5}-\frac{64a_{n-1}a_{n-3}a_{n-4}^3}{a_n^5}-$$
$$\frac{64a_{n-1}a_{n-2}^3a_{n-9}}{a_n^5}-\frac{64a_{n-1}a_{n-3}^3a_{n-6}}{a_n^5}-\frac{64a_{n-2}^3a_{n-3}a_{n-7}}{a_n^5}-\frac{64a_{n-2}^3a_{n-4}a_{n-6}}{a_n^5}-$$
$$\frac{64a_{n-2}a_{n-3}^3a_{n-5}}{a_n^5}+\frac{80a_{n-1}^4a_{n-2}a_{n-10}}{a_n^6}+\frac{80a_{n-1}^4a_{n-3}a_{n-9}}{a_n^6}+\frac{80a_{n-1}^4a_{n-4}a_{n-8}}{a_n^6}+$$
$$\frac{80a_{n-1}^4a_{n-5}a_{n-7}}{a_n^6}+\frac{80a_{n-1}a_{n-2}^4a_{n-7}}{a_n^6}+\frac{80a_{n-2}^4a_{n-3}a_{n-5}}{a_n^6}-\frac{96a_{n-1}^5a_{n-2}a_{n-9}}{a_n^7}-$$
$$\frac{96a_{n-1}^5a_{n-3}a_{n-8}}{a_n^7}-\frac{96a_{n-1}^5a_{n-4}a_{n-7}}{a_n^7}-\frac{96a_{n-1}^5a_{n-5}a_{n-6}}{a_n^7}-\frac{96a_{n-1}a_{n-2}^5a_{n-5}}{a_n^7}+$$
$$\frac{112a_{n-1}^6a_{n-2}a_{n-8}}{a_n^8}+\frac{112a_{n-1}^6a_{n-3}a_{n-7}}{a_n^8}+\frac{112a_{n-1}^6a_{n-4}a_{n-6}}{a_n^8}+\frac{112a_{n-1}a_{n-2}^6a_{n-3}}{a_n^8}-$$
$$\frac{128a_{n-1}^7a_{n-2}a_{n-7}}{a_n^9}-\frac{128a_{n-1}^7a_{n-3}a_{n-6}}{a_n^9}-\frac{128a_{n-1}^7a_{n-4}a_{n-5}}{a_n^9}+\frac{144a_{n-1}^8a_{n-2}a_{n-6}}{a_n^{10}}+$$
$$\frac{144a_{n-1}^8a_{n-3}a_{n-5}}{a_n^{10}}-\frac{160a_{n-1}^9a_{n-2}a_{n-5}}{a_n^{11}}-\frac{160a_{n-1}^9a_{n-3}a_{n-4}}{a_n^{11}}+\frac{176a_{n-1}^{10}a_{n-2}a_{n-4}}{a_n^{12}}-$$
$$\frac{192a_{n-1}^{11}a_{n-2}a_{n-3}}{a_n^{13}}-\frac{96a_{n-1}^2a_{n-2}^2a_{n-10}}{a_n^5}-\frac{96a_{n-1}^2a_{n-3}^2a_{n-8}}{a_n^5}-\frac{96a_{n-1}^2a_{n-4}^2a_{n-6}}{a_n^5}-$$
$$\frac{96a_{n-1}^2a_{n-2}a_{n-6}^2}{a_n^5}-\frac{96a_{n-1}^2a_{n-4}a_{n-5}^2}{a_n^5}-\frac{96a_{n-2}^2a_{n-3}^2a_{n-6}}{a_n^5}-\frac{96a_{n-2}a_{n-3}^2a_{n-4}^2}{a_n^5}+$$
$$\frac{160a_{n-1}^3a_{n-2}^2a_{n-9}}{a_n^6}+\frac{160a_{n-1}^3a_{n-3}^2a_{n-7}}{a_n^6}+\frac{160a_{n-1}^3a_{n-4}^2a_{n-5}}{a_n^6}+\frac{160a_{n-1}^3a_{n-3}a_{n-5}^2}{a_n^6}+$$
$$\frac{160a_{n-1}^2a_{n-2}a_{n-4}^3}{a_n^6}+\frac{160a_{n-1}^2a_{n-2}^3a_{n-8}}{a_n^6}+\frac{160a_{n-1}^2a_{n-3}^3a_{n-5}}{a_n^6}+\frac{160a_{n-2}^3a_{n-3}^2a_{n-4}}{a_n^6}-$$
$$\frac{240a_{n-1}^4a_{n-2}^2a_{n-8}}{a_n^7}-\frac{240a_{n-1}^4a_{n-3}^2a_{n-6}}{a_n^7}-\frac{240a_{n-1}^4a_{n-2}a_{n-5}^2}{a_n^7}-\frac{240a_{n-1}^2a_{n-2}a_{n-3}^4}{a_n^7}-$$
$$\frac{240a_{n-1}^2a_{n-2}^4a_{n-6}}{a_n^7}+\frac{336a_{n-1}^5a_{n-2}^2a_{n-7}}{a_n^8}+\frac{336a_{n-1}^5a_{n-3}^2a_{n-5}}{a_n^8}+\frac{336a_{n-1}^5a_{n-3}a_{n-4}^2}{a_n^8}+$$
$$\frac{336a_{n-1}^2a_{n-2}^5a_{n-4}}{a_n^8}-\frac{448a_{n-1}^6a_{n-2}^2a_{n-6}}{a_n^9}-\frac{448a_{n-1}^6a_{n-3}^2a_{n-4}}{a_n^9}-\frac{448a_{n-1}^6a_{n-2}a_{n-4}^2}{a_n^9}+$$
$$\frac{576a_{n-1}^7a_{n-2}^2a_{n-5}}{a_n^{10}}-\frac{720a_{n-1}^8a_{n-2}^2a_{n-4}}{a_n^{11}}-\frac{720a_{n-1}^8a_{n-2}a_{n-3}^2}{a_n^{11}}+\frac{880a_{n-1}^9a_{n-2}^2a_{n-3}}{a_n^{12}}-$$
$$\frac{320a_{n-1}^3a_{n-2}^3a_{n-7}}{a_n^7}-\frac{320a_{n-1}^3a_{n-3}^3a_{n-4}}{a_n^7}-\frac{320a_{n-1}a_{n-2}^3a_{n-3}^3}{a_n^7}+\frac{560a_{n-1}^4a_{n-2}^3a_{n-6}}{a_n^8}+$$
$$\frac{560a_{n-1}^3a_{n-2}^4a_{n-5}}{a_n^8}-\frac{896a_{n-1}^5a_{n-2}^3a_{n-5}}{a_n^9}-\frac{896a_{n-1}^5a_{n-2}a_{n-3}^3}{a_n^9}-\frac{896a_{n-1}^3a_{n-2}^5a_{n-3}}{a_n^9}+$$
$$\frac{1344a_{n-1}^6a_{n-2}^3a_{n-4}}{a_n^{10}}-\frac{1920a_{n-1}^7a_{n-2}^3a_{n-3}}{a_n^{11}}-\frac{1120a_{n-1}^4a_{n-2}^4a_{n-4}}{a_n^9}+\frac{2016a_{n-1}^5a_{n-2}^4a_{n-3}}{a_n^{10}}+$$
$$\frac{240a_{n-1}^2a_{n-2}^2a_{n-5}^2}{a_n^6}+\frac{240a_{n-1}^2a_{n-3}^2a_{n-4}^2}{a_n^6}-\frac{480a_{n-1}^2a_{n-2}^3a_{n-4}^2}{a_n^7}+\frac{840a_{n-1}^2a_{n-2}^4a_{n-3}^2}{a_n^8}+$$
$$\frac{840a_{n-1}^4a_{n-2}^2a_{n-4}^2}{a_n^8}+\frac{2016a_{n-1}^6a_{n-2}^2a_{n-3}^2}{a_n^{10}}+\frac{1120a_{n-1}^3a_{n-2}^2a_{n-3}^3}{a_n^8}-\frac{2240a_{n-1}^4a_{n-2}^3a_{n-3}^2}{a_n^9}+$$
$$\frac{96a_{n-1}a_{n-2}a_{n-3}a_{n-10}}{a_n^4}+\frac{96a_{n-1}a_{n-2}a_{n-4}a_{n-9}}{a_n^4}+\frac{96a_{n-1}a_{n-2}a_{n-5}a_{n-8}}{a_n^4}+$$
$$\frac{96a_{n-1}a_{n-2}a_{n-6}a_{n-7}}{a_n^4}+\frac{96a_{n-1}a_{n-3}a_{n-4}a_{n-8}}{a_n^4}+\frac{96a_{n-1}a_{n-3}a_{n-5}a_{n-7}}{a_n^4}+$$

$$\frac{96a_{n-1}a_{n-4}a_{n-5}a_{n-6}}{a_n^4}+\frac{96a_{n-2}a_{n-3}a_{n-4}a_{n-7}}{a_n^4}+\frac{96a_{n-2}a_{n-3}a_{n-5}a_{n-6}}{a_n^4}-$$
$$\frac{192a_{n-1}^2a_{n-2}a_{n-3}a_{n-9}}{a_n^5}-\frac{192a_{n-1}^2a_{n-2}a_{n-4}a_{n-8}}{a_n^5}-\frac{192a_{n-1}^2a_{n-2}a_{n-5}a_{n-7}}{a_n^5}-$$
$$\frac{192a_{n-1}^2a_{n-3}a_{n-4}a_{n-7}}{a_n^5}-\frac{192a_{n-1}^2a_{n-3}a_{n-5}a_{n-6}}{a_n^5}-\frac{192a_{n-1}a_{n-2}^2a_{n-3}a_{n-8}}{a_n^5}-$$
$$\frac{192a_{n-1}a_{n-2}^2a_{n-4}a_{n-7}}{a_n^5}-\frac{192a_{n-1}a_{n-2}^2a_{n-5}a_{n-6}}{a_n^5}-\frac{192a_{n-1}a_{n-2}a_{n-3}^2a_{n-7}}{a_n^5}-$$
$$\frac{192a_{n-1}a_{n-3}^2a_{n-4}a_{n-5}}{a_n^5}-\frac{192a_{n-1}a_{n-2}a_{n-4}^2a_{n-5}}{a_n^5}-\frac{192a_{n-1}a_{n-2}a_{n-3}a_{n-5}^2}{a_n^5}-$$
$$\frac{192a_{n-2}^2a_{n-3}a_{n-4}a_{n-5}}{a_n^5}+\frac{320a_{n-1}^3a_{n-2}a_{n-3}a_{n-8}}{a_n^6}+\frac{320a_{n-1}^3a_{n-2}a_{n-4}a_{n-7}}{a_n^6}+$$
$$\frac{320a_{n-1}^3a_{n-2}a_{n-5}a_{n-6}}{a_n^6}+\frac{320a_{n-1}^3a_{n-3}a_{n-4}a_{n-6}}{a_n^6}+\frac{320a_{n-1}a_{n-2}^3a_{n-3}a_{n-6}}{a_n^6}+$$
$$\frac{320a_{n-1}a_{n-2}^3a_{n-4}a_{n-5}}{a_n^6}+\frac{320a_{n-1}a_{n-2}a_{n-3}^3a_{n-4}}{a_n^6}-\frac{480a_{n-1}^4a_{n-2}a_{n-3}a_{n-7}}{a_n^7}-$$
$$\frac{480a_{n-1}^4a_{n-2}a_{n-4}a_{n-6}}{a_n^7}-\frac{480a_{n-1}^4a_{n-3}a_{n-4}a_{n-5}}{a_n^7}-\frac{480a_{n-1}a_{n-2}^4a_{n-3}a_{n-4}}{a_n^7}+$$
$$\frac{672a_{n-1}^5a_{n-2}a_{n-3}a_{n-6}}{a_n^8}+\frac{672a_{n-1}^5a_{n-2}a_{n-4}a_{n-5}}{a_n^8}-\frac{896a_{n-1}^6a_{n-2}a_{n-3}a_{n-5}}{a_n^9}+$$
$$\frac{1152a_{n-1}^7a_{n-2}a_{n-3}a_{n-4}}{a_n^{10}}+\frac{480a_{n-1}^2a_{n-2}^2a_{n-3}a_{n-7}}{a_n^6}+\frac{480a_{n-1}^2a_{n-2}^2a_{n-4}a_{n-6}}{a_n^6}+$$
$$\frac{480a_{n-1}^2a_{n-2}a_{n-3}^2a_{n-6}}{a_n^6}+\frac{480a_{n-1}a_{n-2}^2a_{n-3}^2a_{n-5}}{a_n^6}+\frac{480a_{n-1}^2a_{n-2}a_{n-3}a_{n-4}^2}{a_n^6}-$$
$$\frac{960a_{n-1}^3a_{n-2}^2a_{n-3}a_{n-6}}{a_n^7}-\frac{960a_{n-1}^3a_{n-2}^2a_{n-4}a_{n-5}}{a_n^7}-\frac{960a_{n-1}^3a_{n-2}a_{n-3}^2a_{n-5}}{a_n^7}-$$
$$\frac{960a_{n-1}^3a_{n-2}a_{n-3}a_{n-4}^2}{a_n^7}-\frac{960a_{n-1}^2a_{n-2}^3a_{n-3}a_{n-5}}{a_n^7}+\frac{1680a_{n-1}^4a_{n-2}^2a_{n-3}a_{n-5}}{a_n^8}+$$
$$\frac{1680a_{n-1}^4a_{n-2}a_{n-3}^2a_{n-4}}{a_n^8}-\frac{2688a_{n-1}^5a_{n-2}^2a_{n-3}a_{n-4}}{a_n^9}+\frac{2240a_{n-1}^3a_{n-2}^3a_{n-3}a_{n-4}}{a_n^8}-$$
$$\frac{1440a_{n-1}^2a_{n-2}^2a_{n-3}^2a_{n-4}}{a_n^7}-\frac{384a_{n-1}a_{n-2}a_{n-3}a_{n-4}a_{n-6}}{a_n^5}+\frac{960a_{n-1}^2a_{n-2}a_{n-3}a_{n-4}a_{n-5}}{a_n^6}$$

$$\sum_{k=1}^{n} z_k^{17}=-\frac{17a_{n-17}}{a_n}-\frac{a_{n-1}^{17}}{a_n^{17}}+\frac{17a_{n-1}a_{n-16}}{a_n^2}+\frac{17a_{n-2}a_{n-15}}{a_n^2}+\frac{17a_{n-3}a_{n-14}}{a_n^2}+$$
$$\frac{17a_{n-4}a_{n-13}}{a_n^2}+\frac{17a_{n-5}a_{n-12}}{a_n^2}+\frac{17a_{n-6}a_{n-11}}{a_n^2}+\frac{17a_{n-7}a_{n-10}}{a_n^2}+\frac{17a_{n-8}a_{n-9}}{a_n^2}-$$
$$\frac{17a_{n-1}^2a_{n-15}}{a_n^3}-\frac{17a_{n-1}a_{n-8}^2}{a_n^3}-\frac{17a_{n-5}a_{n-6}^2}{a_n^3}-\frac{17a_{n-2}^2a_{n-13}}{a_n^3}-\frac{17a_{n-3}^2a_{n-11}}{a_n^3}-$$
$$\frac{17a_{n-4}^2a_{n-9}}{a_n^3}-\frac{17a_{n-5}^2a_{n-7}}{a_n^3}-\frac{17a_{n-3}a_{n-7}^2}{a_n^3}+\frac{17a_{n-1}^3a_{n-14}}{a_n^4}+\frac{17a_{n-2}^3a_{n-11}}{a_n^4}+$$
$$\frac{17a_{n-3}^3a_{n-8}}{a_n^4}+\frac{17a_{n-4}^3a_{n-5}}{a_n^4}+\frac{17a_{n-2}a_{n-5}^3}{a_n^4}-\frac{17a_{n-1}^4a_{n-13}}{a_n^5}-\frac{17a_{n-1}a_{n-4}^4}{a_n^5}-$$
$$\frac{17a_{n-2}^4a_{n-9}}{a_n^5}-\frac{17a_{n-3}^4a_{n-5}}{a_n^5}+\frac{17a_{n-1}^5a_{n-12}}{a_n^6}+\frac{17a_{n-2}a_{n-3}^5}{a_n^6}+\frac{17a_{n-2}^5a_{n-7}}{a_n^6}-$$
$$\frac{17a_{n-1}^6a_{n-11}}{a_n^6}-\frac{17a_{n-2}^6a_{n-5}}{a_n^7}+\frac{17a_{n-1}^7a_{n-10}}{a_n^8}+\frac{17a_{n-2}^7a_{n-3}}{a_n^8}-\frac{17a_{n-1}^8a_{n-9}}{a_n^9}-$$
$$\frac{17a_{n-1}a_{n-2}^8}{a_n^9}+\frac{17a_{n-1}^9a_{n-8}}{a_n^{10}}-\frac{17a_{n-1}^{10}a_{n-7}}{a_n^{11}}+\frac{17a_{n-1}^{11}a_{n-6}}{a_n^{12}}-\frac{17a_{n-1}^{12}a_{n-5}}{a_n^{13}}+$$

$$\frac{17a_{n-1}^{13}a_{n-4}}{a_n^{14}} - \frac{17a_{n-1}^{14}a_{n-3}}{a_n^{15}} + \frac{17a_{n-1}^{15}a_{n-2}}{a_n^{16}} - \frac{34a_{n-1}^{3}a_{n-7}^{2}}{a_n^{5}} - \frac{34a_{n-3}^{3}a_{n-4}^{2}}{a_n^{5}} -$$
$$\frac{34a_{n-1}^{2}a_{n-5}^{3}}{a_n^{5}} - \frac{51a_{n-1}^{5}a_{n-6}^{2}}{a_n^{7}} - \frac{51a_{n-1}^{2}a_{n-3}^{5}}{a_n^{7}} - \frac{68a_{n-1}^{7}a_{n-5}^{2}}{a_n^{9}} - \frac{85a_{n-1}^{9}a_{n-4}^{2}}{a_n^{11}} -$$
$$\frac{102a_{n-1}^{11}a_{n-3}^{2}}{a_n^{13}} - \frac{119a_{n-1}^{13}a_{n-2}^{2}}{a_n^{15}} - \frac{85a_{n-2}^{4}a_{n-3}^{3}}{a_n^{7}} + \frac{119a_{n-1}^{5}a_{n-4}^{3}}{a_n^{8}} + \frac{204a_{n-1}^{3}a_{n-2}^{7}}{a_n^{10}} -$$
$$\frac{255a_{n-1}^{8}a_{n-3}^{3}}{a_n^{11}} + \frac{442a_{n-1}^{11}a_{n-2}^{3}}{a_n^{14}} - \frac{238a_{n-1}^{5}a_{n-3}^{4}}{a_n^{9}} - \frac{935a_{n-1}^{9}a_{n-2}^{4}}{a_n^{13}} - \frac{714a_{n-1}^{5}a_{n-2}^{6}}{a_n^{11}} +$$
$$\frac{1122a_{n-1}^{7}a_{n-2}^{5}}{a_n^{12}} - \frac{34a_{n-1}a_{n-2}a_{n-14}}{a_n^{3}} - \frac{34a_{n-1}a_{n-3}a_{n-13}}{a_n^{3}} - \frac{34a_{n-1}a_{n-4}a_{n-12}}{a_n^{3}} -$$
$$\frac{34a_{n-1}a_{n-5}a_{n-11}}{a_n^{3}} - \frac{34a_{n-1}a_{n-6}a_{n-10}}{a_n^{3}} - \frac{34a_{n-1}a_{n-7}a_{n-9}}{a_n^{3}} - \frac{34a_{n-2}a_{n-3}a_{n-12}}{a_n^{3}} -$$
$$\frac{34a_{n-2}a_{n-4}a_{n-11}}{a_n^{3}} - \frac{34a_{n-2}a_{n-5}a_{n-10}}{a_n^{3}} - \frac{34a_{n-2}a_{n-6}a_{n-9}}{a_n^{3}} - \frac{34a_{n-2}a_{n-7}a_{n-8}}{a_n^{3}} -$$
$$\frac{34a_{n-3}a_{n-4}a_{n-10}}{a_n^{3}} - \frac{34a_{n-3}a_{n-5}a_{n-9}}{a_n^{3}} - \frac{34a_{n-3}a_{n-6}a_{n-8}}{a_n^{3}} - \frac{34a_{n-4}a_{n-5}a_{n-8}}{a_n^{3}} -$$
$$\frac{34a_{n-4}a_{n-6}a_{n-7}}{a_n^{3}} + \frac{51a_{n-1}^{2}a_{n-2}a_{n-13}}{a_n^{4}} + \frac{51a_{n-1}^{2}a_{n-3}a_{n-12}}{a_n^{4}} + \frac{51a_{n-1}^{2}a_{n-4}a_{n-11}}{a_n^{4}} +$$
$$\frac{51a_{n-1}^{2}a_{n-5}a_{n-10}}{a_n^{4}} + \frac{51a_{n-1}^{2}a_{n-6}a_{n-9}}{a_n^{4}} + \frac{51a_{n-1}^{2}a_{n-7}a_{n-8}}{a_n^{4}} + \frac{51a_{n-1}a_{n-4}a_{n-6}^{2}}{a_n^{4}} +$$
$$\frac{51a_{n-1}a_{n-2}^{2}a_{n-12}}{a_n^{4}} + \frac{51a_{n-1}a_{n-3}^{2}a_{n-10}}{a_n^{4}} + \frac{51a_{n-1}a_{n-4}^{2}a_{n-8}}{a_n^{4}} + \frac{51a_{n-1}a_{n-5}^{2}a_{n-6}}{a_n^{4}} +$$
$$\frac{51a_{n-1}a_{n-2}a_{n-7}^{2}}{a_n^{4}} + \frac{51a_{n-2}^{2}a_{n-3}a_{n-10}}{a_n^{4}} + \frac{51a_{n-2}^{2}a_{n-4}a_{n-9}}{a_n^{4}} + \frac{51a_{n-2}^{2}a_{n-5}a_{n-8}}{a_n^{4}} +$$
$$\frac{51a_{n-2}^{2}a_{n-6}a_{n-7}}{a_n^{4}} + \frac{51a_{n-2}a_{n-3}^{2}a_{n-9}}{a_n^{4}} + \frac{51a_{n-3}^{2}a_{n-4}a_{n-7}}{a_n^{4}} + \frac{51a_{n-3}^{2}a_{n-5}a_{n-6}}{a_n^{4}} +$$
$$\frac{51a_{n-2}a_{n-4}^{2}a_{n-7}}{a_n^{4}} + \frac{51a_{n-3}a_{n-4}^{2}a_{n-6}}{a_n^{4}} + \frac{51a_{n-3}a_{n-4}a_{n-5}^{2}}{a_n^{4}} - \frac{68a_{n-1}^{3}a_{n-2}a_{n-12}}{a_n^{5}} -$$
$$\frac{68a_{n-1}^{3}a_{n-3}a_{n-11}}{a_n^{5}} - \frac{68a_{n-1}^{3}a_{n-4}a_{n-10}}{a_n^{5}} - \frac{68a_{n-1}^{3}a_{n-5}a_{n-9}}{a_n^{5}} - \frac{68a_{n-1}^{3}a_{n-6}a_{n-8}}{a_n^{5}} -$$
$$\frac{68a_{n-1}a_{n-2}^{3}a_{n-10}}{a_n^{5}} - \frac{68a_{n-1}a_{n-3}^{3}a_{n-7}}{a_n^{5}} - \frac{68a_{n-1}a_{n-2}a_{n-4}^{3}}{a_n^{5}} - \frac{68a_{n-2}^{3}a_{n-3}a_{n-8}}{a_n^{5}} -$$
$$\frac{68a_{n-2}^{3}a_{n-4}a_{n-7}}{a_n^{5}} - \frac{68a_{n-2}^{3}a_{n-5}a_{n-6}}{a_n^{5}} - \frac{68a_{n-2}a_{n-2}a_{n-3}^{3}a_{n-6}}{a_n^{5}} - \frac{68a_{n-2}a_{n-3}a_{n-4}^{3}}{a_n^{5}} +$$
$$\frac{85a_{n-1}^{4}a_{n-2}a_{n-11}}{a_n^{6}} + \frac{85a_{n-1}^{4}a_{n-3}a_{n-10}}{a_n^{6}} + \frac{85a_{n-1}^{4}a_{n-4}a_{n-9}}{a_n^{6}} + \frac{85a_{n-1}^{4}a_{n-5}a_{n-8}}{a_n^{6}} +$$
$$\frac{85a_{n-1}^{4}a_{n-6}a_{n-7}}{a_n^{6}} + \frac{85a_{n-1}a_{n-2}^{4}a_{n-8}}{a_n^{6}} + \frac{85a_{n-1}a_{n-3}^{4}a_{n-4}}{a_n^{6}} + \frac{85a_{n-2}^{4}a_{n-3}a_{n-6}}{a_n^{6}} +$$
$$\frac{85a_{n-2}^{4}a_{n-4}a_{n-5}}{a_n^{6}} - \frac{102a_{n-1}^{5}a_{n-2}a_{n-10}}{a_n^{7}} - \frac{102a_{n-1}^{5}a_{n-3}a_{n-9}}{a_n^{7}} - \frac{102a_{n-1}^{5}a_{n-4}a_{n-8}}{a_n^{7}} -$$
$$\frac{102a_{n-1}^{5}a_{n-5}a_{n-7}}{a_n^{7}} - \frac{102a_{n-1}a_{n-2}^{5}a_{n-6}}{a_n^{7}} - \frac{102a_{n-2}^{5}a_{n-3}a_{n-4}}{a_n^{7}} + \frac{119a_{n-1}^{6}a_{n-2}a_{n-9}}{a_n^{8}} +$$
$$\frac{119a_{n-1}^{6}a_{n-3}a_{n-8}}{a_n^{8}} + \frac{119a_{n-1}^{6}a_{n-4}a_{n-7}}{a_n^{8}} + \frac{119a_{n-1}^{6}a_{n-5}a_{n-6}}{a_n^{8}} + \frac{119a_{n-1}a_{n-2}^{6}a_{n-4}}{a_n^{8}} -$$
$$\frac{136a_{n-1}^{7}a_{n-2}a_{n-8}}{a_n^{9}} - \frac{136a_{n-1}^{7}a_{n-3}a_{n-7}}{a_n^{9}} - \frac{136a_{n-1}^{7}a_{n-4}a_{n-6}}{a_n^{9}} + \frac{153a_{n-1}^{8}a_{n-2}a_{n-7}}{a_n^{10}} +$$
$$\frac{153a_{n-1}^{8}a_{n-3}a_{n-6}}{a_n^{10}} + \frac{153a_{n-1}^{8}a_{n-4}a_{n-5}}{a_n^{10}} - \frac{170a_{n-1}^{9}a_{n-2}a_{n-6}}{a_n^{11}} - \frac{170a_{n-1}^{9}a_{n-3}a_{n-5}}{a_n^{11}} +$$

$$\frac{187a_{n-1}^{10}a_{n-2}a_{n-5}}{a_n^{12}}+\frac{187a_{n-1}^{10}a_{n-3}a_{n-4}}{a_n^{12}}-\frac{204a_{n-1}^{11}a_{n-2}a_{n-4}}{a_n^{13}}+\frac{221a_{n-1}^{12}a_{n-2}a_{n-3}}{a_n^{14}}-$$
$$\frac{102a_{n-1}^{2}a_{n-3}a_{n-6}^{2}}{a_n^{5}}-\frac{102a_{n-1}^{2}a_{n-2}^{2}a_{n-11}}{a_n^{5}}-\frac{102a_{n-1}^{2}a_{n-3}^{2}a_{n-9}}{a_n^{5}}-\frac{102a_{n-1}^{2}a_{n-4}^{2}a_{n-7}}{a_n^{5}}-$$
$$\frac{102a_{n-1}a_{n-2}^{2}a_{n-6}^{2}}{a_n^{5}}-\frac{102a_{n-1}a_{n-3}^{2}a_{n-5}^{2}}{a_n^{5}}-\frac{102a_{n-2}^{2}a_{n-3}a_{n-7}^{2}}{a_n^{5}}-\frac{102a_{n-2}^{2}a_{n-4}^{2}a_{n-5}}{a_n^{5}}-$$
$$\frac{102a_{n-2}^{2}a_{n-3}a_{n-5}^{2}}{a_n^{5}}+\frac{170a_{n-1}^{3}a_{n-2}^{2}a_{n-10}}{a_n^{6}}+\frac{170a_{n-1}^{3}a_{n-3}^{2}a_{n-8}}{a_n^{6}}+\frac{170a_{n-1}^{3}a_{n-4}^{2}a_{n-6}}{a_n^{6}}+$$
$$\frac{170a_{n-1}^{3}a_{n-4}a_{n-5}^{2}}{a_n^{6}}+\frac{170a_{n-1}^{3}a_{n-2}a_{n-6}^{2}}{a_n^{6}}+\frac{170a_{n-1}a_{n-2}^{2}a_{n-4}^{3}}{a_n^{6}}+\frac{170a_{n-1}a_{n-2}^{3}a_{n-5}^{2}}{a_n^{6}}+$$
$$\frac{170a_{n-1}^{2}a_{n-3}a_{n-4}^{3}}{a_n^{6}}+\frac{170a_{n-1}^{2}a_{n-2}^{3}a_{n-9}}{a_n^{6}}+\frac{170a_{n-1}^{2}a_{n-3}^{3}a_{n-6}}{a_n^{6}}+\frac{170a_{n-2}^{3}a_{n-3}^{2}a_{n-5}}{a_n^{6}}+$$
$$\frac{170a_{n-2}^{3}a_{n-3}a_{n-4}^{2}}{a_n^{6}}+\frac{170a_{n-2}^{2}a_{n-3}^{3}a_{n-4}}{a_n^{6}}-\frac{255a_{n-1}^{4}a_{n-2}^{2}a_{n-9}}{a_n^{7}}-\frac{255a_{n-1}^{4}a_{n-3}^{2}a_{n-7}}{a_n^{7}}-$$
$$\frac{255a_{n-1}^{4}a_{n-4}^{2}a_{n-5}}{a_n^{7}}-\frac{255a_{n-1}^{4}a_{n-3}a_{n-5}^{2}}{a_n^{7}}-\frac{255a_{n-1}^{2}a_{n-2}^{4}a_{n-7}}{a_n^{7}}-\frac{255a_{n-1}a_{n-2}^{2}a_{n-3}^{4}}{a_n^{7}}-$$
$$\frac{255a_{n-1}a_{n-2}^{4}a_{n-4}^{2}}{a_n^{7}}+\frac{357a_{n-1}^{5}a_{n-2}^{2}a_{n-8}}{a_n^{8}}+\frac{357a_{n-1}^{5}a_{n-3}^{2}a_{n-6}}{a_n^{8}}+\frac{357a_{n-1}^{5}a_{n-2}a_{n-5}^{2}}{a_n^{8}}+$$
$$\frac{357a_{n-1}^{2}a_{n-2}^{5}a_{n-5}}{a_n^{8}}+\frac{357a_{n-1}a_{n-2}^{5}a_{n-3}^{2}}{a_n^{8}}-\frac{476a_{n-1}^{6}a_{n-2}^{2}a_{n-7}}{a_n^{9}}-\frac{476a_{n-1}^{6}a_{n-3}^{2}a_{n-5}}{a_n^{9}}-$$
$$\frac{476a_{n-1}^{6}a_{n-3}a_{n-4}^{2}}{a_n^{9}}-\frac{476a_{n-1}^{2}a_{n-2}^{6}a_{n-3}}{a_n^{9}}+\frac{612a_{n-1}^{7}a_{n-2}^{2}a_{n-6}}{a_n^{10}}+\frac{612a_{n-1}^{7}a_{n-3}^{2}a_{n-4}}{a_n^{10}}+$$
$$\frac{612a_{n-1}^{7}a_{n-2}a_{n-4}^{2}}{a_n^{10}}-\frac{765a_{n-1}^{8}a_{n-2}^{2}a_{n-5}}{a_n^{11}}+\frac{935a_{n-1}^{9}a_{n-2}^{2}a_{n-4}}{a_n^{12}}+\frac{935a_{n-1}^{9}a_{n-2}a_{n-3}^{2}}{a_n^{12}}-$$
$$\frac{1122a_{n-1}^{10}a_{n-2}^{2}a_{n-3}}{a_n^{13}}-\frac{340a_{n-1}^{3}a_{n-2}a_{n-4}^{3}}{a_n^{7}}-\frac{340a_{n-1}^{3}a_{n-2}^{3}a_{n-8}}{a_n^{7}}-\frac{340a_{n-1}^{3}a_{n-3}^{3}a_{n-5}}{a_n^{7}}+$$
$$\frac{595a_{n-1}^{4}a_{n-2}^{3}a_{n-7}}{a_n^{8}}+\frac{595a_{n-1}^{4}a_{n-3}^{3}a_{n-4}}{a_n^{8}}+\frac{595a_{n-1}^{3}a_{n-2}a_{n-3}^{4}}{a_n^{8}}+\frac{595a_{n-1}^{3}a_{n-2}^{4}a_{n-6}}{a_n^{8}}-$$
$$\frac{952a_{n-1}^{5}a_{n-2}^{3}a_{n-6}}{a_n^{9}}-\frac{952a_{n-1}^{3}a_{n-2}^{5}a_{n-4}}{a_n^{9}}+\frac{1428a_{n-1}^{6}a_{n-2}^{3}a_{n-5}}{a_n^{10}}+\frac{1428a_{n-1}^{6}a_{n-2}a_{n-3}^{3}}{a_n^{10}}-$$
$$\frac{2040a_{n-1}^{7}a_{n-2}^{3}a_{n-4}}{a_n^{11}}+\frac{2805a_{n-1}^{8}a_{n-2}^{3}a_{n-3}}{a_n^{12}}-\frac{1190a_{n-1}^{4}a_{n-2}^{4}a_{n-5}}{a_n^{9}}+\frac{2142a_{n-1}^{5}a_{n-2}^{4}a_{n-4}}{a_n^{10}}+$$
$$\frac{2142a_{n-1}^{4}a_{n-2}^{5}a_{n-3}}{a_n^{10}}-\frac{3570a_{n-1}^{6}a_{n-2}^{4}a_{n-3}}{a_n^{11}}-\frac{510a_{n-1}^{3}a_{n-2}^{2}a_{n-5}^{2}}{a_n^{7}}-\frac{510a_{n-1}^{3}a_{n-3}^{2}a_{n-4}^{2}}{a_n^{7}}+$$
$$\frac{1190a_{n-1}^{3}a_{n-2}^{3}a_{n-4}^{2}}{a_n^{8}}+\frac{1190a_{n-1}^{2}a_{n-2}^{3}a_{n-3}^{3}}{a_n^{8}}-\frac{2380a_{n-1}^{3}a_{n-2}^{4}a_{n-3}^{2}}{a_n^{9}}-\frac{1428a_{n-1}^{5}a_{n-2}^{2}a_{n-4}^{2}}{a_n^{9}}-$$
$$\frac{3060a_{n-1}^{7}a_{n-2}^{2}a_{n-3}^{2}}{a_n^{11}}-\frac{2380a_{n-1}^{4}a_{n-2}^{2}a_{n-3}^{3}}{a_n^{9}}+\frac{4284a_{n-1}^{5}a_{n-2}^{3}a_{n-3}^{2}}{a_n^{10}}+$$
$$\frac{102a_{n-1}a_{n-2}a_{n-3}a_{n-11}}{a_n^{4}}+\frac{102a_{n-1}a_{n-2}a_{n-4}a_{n-10}}{a_n^{4}}+\frac{102a_{n-1}a_{n-2}a_{n-5}a_{n-9}}{a_n^{4}}+$$
$$\frac{102a_{n-1}a_{n-2}a_{n-6}a_{n-8}}{a_n^{4}}+\frac{102a_{n-1}a_{n-3}a_{n-4}a_{n-9}}{a_n^{4}}+\frac{102a_{n-1}a_{n-3}a_{n-5}a_{n-8}}{a_n^{4}}+$$
$$\frac{102a_{n-1}a_{n-3}a_{n-6}a_{n-7}}{a_n^{4}}+\frac{102a_{n-1}a_{n-4}a_{n-5}a_{n-7}}{a_n^{4}}+\frac{102a_{n-2}a_{n-3}a_{n-4}a_{n-8}}{a_n^{4}}+$$
$$\frac{102a_{n-2}a_{n-3}a_{n-5}a_{n-7}}{a_n^{4}}+\frac{102a_{n-2}a_{n-4}a_{n-5}a_{n-6}}{a_n^{4}}-\frac{204a_{n-1}^{2}a_{n-2}a_{n-3}a_{n-10}}{a_n^{5}}-$$
$$\frac{204a_{n-1}^{2}a_{n-2}a_{n-4}a_{n-9}}{a_n^{5}}-\frac{204a_{n-1}^{2}a_{n-2}a_{n-5}a_{n-8}}{a_n^{5}}-\frac{204a_{n-1}^{2}a_{n-2}a_{n-6}a_{n-7}}{a_n^{5}}-$$

$$\frac{204a_{n-1}^2a_{n-3}a_{n-4}a_{n-8}}{a_n^5} - \frac{204a_{n-1}^2a_{n-3}a_{n-5}a_{n-7}}{a_n^5} - \frac{204a_{n-1}^2a_{n-4}a_{n-5}a_{n-6}}{a_n^5} -$$
$$\frac{204a_{n-1}a_{n-2}^2a_{n-3}a_{n-9}}{a_n^5} - \frac{204a_{n-1}a_{n-2}^2a_{n-4}a_{n-8}}{a_n^5} - \frac{204a_{n-1}a_{n-2}^2a_{n-5}a_{n-7}}{a_n^5} -$$
$$\frac{204a_{n-1}a_{n-2}a_{n-3}^2a_{n-8}}{a_n^5} - \frac{204a_{n-1}a_{n-3}^2a_{n-4}a_{n-6}}{a_n^5} - \frac{204a_{n-1}a_{n-2}a_{n-4}^2a_{n-6}}{a_n^5} -$$
$$\frac{204a_{n-1}a_{n-3}a_{n-4}^2a_{n-5}}{a_n^5} - \frac{204a_{n-1}a_{n-2}a_{n-4}a_{n-5}^2}{a_n^5} - \frac{204a_{n-2}^2a_{n-3}a_{n-4}a_{n-6}}{a_n^5} -$$
$$\frac{204a_{n-2}a_{n-3}^2a_{n-4}a_{n-5}}{a_n^5} + \frac{340a_{n-1}^3a_{n-2}a_{n-3}a_{n-9}}{a_n^6} + \frac{340a_{n-1}^3a_{n-2}a_{n-4}a_{n-8}}{a_n^6} +$$
$$\frac{340a_{n-1}^3a_{n-2}a_{n-5}a_{n-7}}{a_n^6} + \frac{340a_{n-1}^3a_{n-3}a_{n-4}a_{n-7}}{a_n^6} + \frac{340a_{n-1}^3a_{n-3}a_{n-5}a_{n-6}}{a_n^6} +$$
$$\frac{340a_{n-1}a_{n-2}^3a_{n-3}a_{n-7}}{a_n^6} + \frac{340a_{n-1}a_{n-2}^3a_{n-4}a_{n-6}}{a_n^6} + \frac{340a_{n-1}a_{n-2}a_{n-3}^3a_{n-5}}{a_n^6} -$$
$$\frac{510a_{n-1}^4a_{n-2}a_{n-3}a_{n-8}}{a_n^7} - \frac{510a_{n-1}^4a_{n-2}a_{n-4}a_{n-7}}{a_n^7} - \frac{510a_{n-1}^4a_{n-2}a_{n-5}a_{n-6}}{a_n^7} -$$
$$\frac{510a_{n-1}^4a_{n-3}a_{n-4}a_{n-6}}{a_n^7} - \frac{510a_{n-1}a_{n-2}^4a_{n-3}a_{n-5}}{a_n^7} + \frac{714a_{n-1}^5a_{n-2}a_{n-3}a_{n-7}}{a_n^8} +$$
$$\frac{714a_{n-1}^5a_{n-2}a_{n-4}a_{n-6}}{a_n^8} + \frac{714a_{n-1}^5a_{n-3}a_{n-4}a_{n-5}}{a_n^8} - \frac{952a_{n-1}^6a_{n-2}a_{n-3}a_{n-6}}{a_n^9} -$$
$$\frac{952a_{n-1}^6a_{n-2}a_{n-4}a_{n-5}}{a_n^9} + \frac{1224a_{n-1}^7a_{n-2}a_{n-3}a_{n-5}}{a_n^{10}} - \frac{1530a_{n-1}^8a_{n-2}a_{n-3}a_{n-4}}{a_n^{11}} +$$
$$\frac{510a_{n-1}^2a_{n-2}^2a_{n-3}a_{n-8}}{a_n^6} + \frac{510a_{n-1}^2a_{n-2}^2a_{n-4}a_{n-7}}{a_n^6} + \frac{510a_{n-1}^2a_{n-2}^2a_{n-5}a_{n-6}}{a_n^6} +$$
$$\frac{510a_{n-1}^2a_{n-2}a_{n-3}^2a_{n-7}}{a_n^6} + \frac{510a_{n-1}^2a_{n-3}^2a_{n-4}a_{n-5}}{a_n^6} + \frac{510a_{n-1}^2a_{n-2}a_{n-4}^2a_{n-5}}{a_n^6} +$$
$$\frac{510a_{n-1}^2a_{n-2}a_{n-3}a_{n-5}^2}{a_n^6} + \frac{510a_{n-1}a_{n-2}^2a_{n-3}^2a_{n-6}}{a_n^6} + \frac{510a_{n-1}a_{n-2}a_{n-3}^2a_{n-4}^2}{a_n^6} -$$
$$\frac{1020a_{n-1}^3a_{n-2}^2a_{n-3}a_{n-7}}{a_n^7} - \frac{1020a_{n-1}^3a_{n-2}^2a_{n-4}a_{n-6}}{a_n^7} - \frac{1020a_{n-1}^3a_{n-2}a_{n-3}^2a_{n-6}}{a_n^7} -$$
$$\frac{1020a_{n-1}^2a_{n-2}^3a_{n-3}a_{n-6}}{a_n^7} - \frac{1020a_{n-1}^2a_{n-2}^3a_{n-4}a_{n-5}}{a_n^7} - \frac{1020a_{n-1}^2a_{n-2}a_{n-3}^3a_{n-4}}{a_n^7} -$$
$$\frac{1020a_{n-1}a_{n-2}^3a_{n-3}^2a_{n-4}}{a_n^7} + \frac{1785a_{n-1}^4a_{n-2}^2a_{n-3}a_{n-6}}{a_n^8} + \frac{1785a_{n-1}^4a_{n-2}^2a_{n-4}a_{n-5}}{a_n^8} +$$
$$\frac{1785a_{n-1}^4a_{n-2}a_{n-3}^2a_{n-5}}{a_n^8} + \frac{1785a_{n-1}^4a_{n-2}a_{n-3}a_{n-4}^2}{a_n^8} + \frac{1785a_{n-1}^2a_{n-2}^4a_{n-3}a_{n-4}}{a_n^8} -$$
$$\frac{2856a_{n-1}^5a_{n-2}^2a_{n-3}a_{n-5}}{a_n^9} - \frac{2856a_{n-1}^5a_{n-2}a_{n-3}^2a_{n-4}}{a_n^9} + \frac{4284a_{n-1}^6a_{n-2}^2a_{n-3}a_{n-4}}{a_n^{10}} +$$
$$\frac{2380a_{n-1}^3a_{n-2}^3a_{n-3}a_{n-5}}{a_n^8} - \frac{4760a_{n-1}^4a_{n-2}^3a_{n-3}a_{n-4}}{a_n^9} - \frac{1530a_{n-1}^2a_{n-2}^2a_{n-3}^2a_{n-5}}{a_n^7} -$$
$$\frac{1530a_{n-1}^2a_{n-2}^2a_{n-3}a_{n-4}^2}{a_n^7} + \frac{3570a_{n-1}^3a_{n-2}^2a_{n-3}^2a_{n-4}}{a_n^8} - \frac{408a_{n-1}a_{n-2}a_{n-3}a_{n-4}a_{n-7}}{a_n^5} -$$
$$\frac{408a_{n-1}a_{n-2}a_{n-3}a_{n-5}a_{n-6}}{a_n^5} + \frac{1020a_{n-1}^2a_{n-2}a_{n-3}a_{n-4}a_{n-6}}{a_n^6} +$$
$$\frac{1020a_{n-1}a_{n-2}^2a_{n-3}a_{n-4}a_{n-5}}{a_n^6} - \frac{2040a_{n-1}^3a_{n-2}a_{n-3}a_{n-4}a_{n-5}}{a_n^7}$$

$$\sum_{k=1}^{n} z_k^{18} = -\frac{18a_{n-18}}{a_n} + \frac{9a_{n-9}^2}{a_n^2} - \frac{6a_{n-6}^3}{a_n^3} + \frac{3a_{n-3}^6}{a_n^6} - \frac{2a_{n-2}^9}{a_n^9} + \frac{a_{n-1}^{18}}{a_n^{18}} + \frac{18a_{n-1}a_{n-17}}{a_n^2} +$$
$$\frac{18a_{n-2}a_{n-16}}{a_n^2} + \frac{18a_{n-3}a_{n-15}}{a_n^2} + \frac{18a_{n-4}a_{n-14}}{a_n^2} + \frac{18a_{n-5}a_{n-13}}{a_n^2} + \frac{18a_{n-6}a_{n-12}}{a_n^2} +$$
$$\frac{18a_{n-7}a_{n-11}}{a_n^2} + \frac{18a_{n-8}a_{n-10}}{a_n^2} - \frac{18a_{n-1}^2a_{n-16}}{a_n^3} - \frac{18a_{n-2}a_{n-8}^2}{a_n^3} - \frac{18a_{n-2}^2a_{n-14}}{a_n^3} -$$
$$\frac{18a_{n-3}^2a_{n-12}}{a_n^3} - \frac{18a_{n-4}^2a_{n-10}}{a_n^3} - \frac{18a_{n-5}^2a_{n-8}}{a_n^3} - \frac{18a_{n-4}a_{n-7}^2}{a_n^3} + \frac{18a_{n-1}^3a_{n-15}}{a_n^4} +$$
$$\frac{18a_{n-2}^3a_{n-12}}{a_n^4} + \frac{18a_{n-3}^3a_{n-9}}{a_n^4} + \frac{18a_{n-4}^3a_{n-6}}{a_n^4} + \frac{18a_{n-3}a_{n-5}^3}{a_n^4} - \frac{18a_{n-1}^4a_{n-14}}{a_n^5} -$$
$$\frac{18a_{n-2}a_{n-4}^4}{a_n^5} - \frac{18a_{n-2}^4a_{n-10}}{a_n^5} - \frac{18a_{n-3}^4a_{n-6}}{a_n^5} + \frac{18a_{n-1}^5a_{n-13}}{a_n^6} + \frac{18a_{n-2}^5a_{n-8}}{a_n^6} -$$
$$\frac{18a_{n-1}^6a_{n-12}}{a_n^7} - \frac{18a_{n-2}^6a_{n-6}}{a_n^7} + \frac{18a_{n-1}^7a_{n-11}}{a_n^8} + \frac{18a_{n-2}^7a_{n-4}}{a_n^8} - \frac{18a_{n-1}^8a_{n-10}}{a_n^9} +$$
$$\frac{18a_{n-1}^9a_{n-9}}{a_n^{10}} - \frac{18a_{n-1}^{10}a_{n-8}}{a_n^{11}} + \frac{18a_{n-1}^{11}a_{n-7}}{a_n^{12}} - \frac{18a_{n-1}^{12}a_{n-6}}{a_n^{13}} + \frac{18a_{n-1}^{13}a_{n-5}}{a_n^{14}} -$$
$$\frac{18a_{n-1}^{14}a_{n-4}}{a_n^{15}} + \frac{18a_{n-1}^{15}a_{n-3}}{a_n^{16}} - \frac{18a_{n-1}^{16}a_{n-2}}{a_n^{17}} + \frac{27a_{n-1}^2a_{n-8}^2}{a_n^4} + \frac{27a_{n-2}^2a_{n-7}^2}{a_n^4} +$$
$$\frac{27a_{n-3}^2a_{n-6}^2}{a_n^4} + \frac{27a_{n-4}^2a_{n-5}^2}{a_n^4} - \frac{36a_{n-2}^3a_{n-6}^2}{a_n^5} - \frac{36a_{n-3}^2a_{n-4}^3}{a_n^5} + \frac{45a_{n-1}^4a_{n-7}^2}{a_n^6} +$$
$$\frac{45a_{n-1}^2a_{n-4}^4}{a_n^6} + \frac{45a_{n-2}^4a_{n-5}^2}{a_n^6} - \frac{54a_{n-2}^5a_{n-4}^2}{a_n^7} + \frac{63a_{n-1}^6a_{n-6}^2}{a_n^8} + \frac{63a_{n-2}^6a_{n-3}^2}{a_n^8} +$$
$$\frac{81a_{n-1}^8a_{n-5}^2}{a_n^{10}} + \frac{81a_{n-1}^2a_{n-2}^8}{a_n^{10}} + \frac{99a_{n-1}^{10}a_{n-4}^2}{a_n^{12}} + \frac{117a_{n-1}^{12}a_{n-3}^2}{a_n^{14}} + \frac{135a_{n-1}^{14}a_{n-2}^2}{a_n^{16}} +$$
$$\frac{60a_{n-1}^3a_{n-5}^3}{a_n^6} + \frac{60a_{n-2}^3a_{n-4}^3}{a_n^6} - \frac{90a_{n-2}^3a_{n-3}^4}{a_n^7} + \frac{126a_{n-1}^3a_{n-3}^5}{a_n^8} - \frac{168a_{n-1}^6a_{n-4}^3}{a_n^9} +$$
$$\frac{330a_{n-1}^9a_{n-3}^3}{a_n^{12}} - \frac{546a_{n-1}^{12}a_{n-2}^3}{a_n^{15}} + \frac{378a_{n-1}^6a_{n-3}^4}{a_n^{10}} - \frac{540a_{n-1}^4a_{n-2}^7}{a_n^{11}} + \frac{1287a_{n-1}^{10}a_{n-2}^4}{a_n^{14}} -$$
$$\frac{1782a_{n-1}^8a_{n-2}^5}{a_n^{13}} + \frac{1386a_{n-1}^6a_{n-2}^6}{a_n^{12}} - \frac{36a_{n-1}a_{n-2}a_{n-15}}{a_n^3} - \frac{36a_{n-1}a_{n-3}a_{n-14}}{a_n^3} -$$
$$\frac{36a_{n-1}a_{n-4}a_{n-13}}{a_n^3} - \frac{36a_{n-1}a_{n-5}a_{n-12}}{a_n^3} - \frac{36a_{n-1}a_{n-6}a_{n-11}}{a_n^3} - \frac{36a_{n-1}a_{n-7}a_{n-10}}{a_n^3} -$$
$$\frac{36a_{n-1}a_{n-8}a_{n-9}}{a_n^3} - \frac{36a_{n-2}a_{n-3}a_{n-13}}{a_n^3} - \frac{36a_{n-2}a_{n-4}a_{n-12}}{a_n^3} - \frac{36a_{n-2}a_{n-5}a_{n-11}}{a_n^3} -$$
$$\frac{36a_{n-2}a_{n-6}a_{n-10}}{a_n^3} - \frac{36a_{n-2}a_{n-7}a_{n-9}}{a_n^3} - \frac{36a_{n-3}a_{n-4}a_{n-11}}{a_n^3} - \frac{36a_{n-3}a_{n-5}a_{n-10}}{a_n^3} -$$
$$\frac{36a_{n-3}a_{n-6}a_{n-9}}{a_n^3} - \frac{36a_{n-3}a_{n-7}a_{n-8}}{a_n^3} - \frac{36a_{n-4}a_{n-5}a_{n-9}}{a_n^3} - \frac{36a_{n-4}a_{n-6}a_{n-8}}{a_n^3} -$$
$$\frac{36a_{n-5}a_{n-6}a_{n-7}}{a_n^3} + \frac{54a_{n-1}^2a_{n-2}a_{n-14}}{a_n^4} + \frac{54a_{n-1}^2a_{n-3}a_{n-13}}{a_n^4} + \frac{54a_{n-1}^2a_{n-4}a_{n-12}}{a_n^4} +$$
$$\frac{54a_{n-1}^2a_{n-5}a_{n-11}}{a_n^4} + \frac{54a_{n-1}^2a_{n-6}a_{n-10}}{a_n^4} + \frac{54a_{n-1}^2a_{n-7}a_{n-9}}{a_n^4} + \frac{54a_{n-1}a_{n-5}a_{n-6}^2}{a_n^4} +$$
$$\frac{54a_{n-1}a_{n-2}^2a_{n-13}}{a_n^4} + \frac{54a_{n-1}a_{n-3}^2a_{n-11}}{a_n^4} + \frac{54a_{n-1}a_{n-4}^2a_{n-9}}{a_n^4} + \frac{54a_{n-1}a_{n-5}^2a_{n-7}}{a_n^4} +$$
$$\frac{54a_{n-1}a_{n-3}a_{n-7}^2}{a_n^4} + \frac{54a_{n-2}^2a_{n-3}a_{n-11}}{a_n^4} + \frac{54a_{n-2}^2a_{n-4}a_{n-10}}{a_n^4} + \frac{54a_{n-2}^2a_{n-5}a_{n-9}}{a_n^4} +$$
$$\frac{54a_{n-2}^2a_{n-6}a_{n-8}}{a_n^4} + \frac{54a_{n-2}a_{n-3}^2a_{n-10}}{a_n^4} + \frac{54a_{n-3}^2a_{n-4}a_{n-8}}{a_n^4} + \frac{54a_{n-3}^2a_{n-5}a_{n-7}}{a_n^4} +$$

$$\frac{54a_{n-2}a_{n-4}^2a_{n-8}}{a_n^4}+\frac{54a_{n-3}a_{n-4}^2a_{n-7}}{a_n^4}+\frac{54a_{n-2}a_{n-5}^2a_{n-6}}{a_n^4}+\frac{54a_{n-2}a_{n-4}a_{n-6}^2}{a_n^4}-$$
$$\frac{72a_{n-1}^3a_{n-2}a_{n-13}}{a_n^5}-\frac{72a_{n-1}^3a_{n-3}a_{n-12}}{a_n^5}-\frac{72a_{n-1}^3a_{n-4}a_{n-11}}{a_n^5}-\frac{72a_{n-1}^3a_{n-5}a_{n-10}}{a_n^5}-$$
$$\frac{72a_{n-1}^3a_{n-6}a_{n-9}}{a_n^5}-\frac{72a_{n-1}^3a_{n-7}a_{n-8}}{a_n^5}-\frac{72a_{n-1}a_{n-2}^3a_{n-11}}{a_n^5}-\frac{72a_{n-1}a_{n-3}^3a_{n-8}}{a_n^5}-$$
$$\frac{72a_{n-1}a_{n-4}^3a_{n-5}}{a_n^5}-\frac{72a_{n-1}a_{n-2}a_{n-5}^3}{a_n^5}-\frac{72a_{n-2}^3a_{n-3}a_{n-9}}{a_n^5}-\frac{72a_{n-2}^3a_{n-4}a_{n-8}}{a_n^5}-$$
$$\frac{72a_{n-2}^3a_{n-5}a_{n-7}}{a_n^5}-\frac{72a_{n-2}a_{n-3}^3a_{n-7}}{a_n^5}-\frac{72a_{n-3}^3a_{n-4}a_{n-5}}{a_n^5}+\frac{90a_{n-1}^4a_{n-2}a_{n-12}}{a_n^6}+$$
$$\frac{90a_{n-1}^4a_{n-3}a_{n-11}}{a_n^6}+\frac{90a_{n-1}^4a_{n-4}a_{n-10}}{a_n^6}+\frac{90a_{n-1}^4a_{n-5}a_{n-9}}{a_n^6}+\frac{90a_{n-1}^4a_{n-6}a_{n-8}}{a_n^6}+$$
$$\frac{90a_{n-1}a_{n-2}^4a_{n-9}}{a_n^6}+\frac{90a_{n-1}a_{n-3}^4a_{n-5}}{a_n^6}+\frac{90a_{n-2}^4a_{n-3}a_{n-7}}{a_n^6}+\frac{90a_{n-2}^4a_{n-4}a_{n-6}}{a_n^6}+$$
$$\frac{90a_{n-2}a_{n-3}^4a_{n-4}}{a_n^6}-\frac{108a_{n-1}^5a_{n-2}a_{n-11}}{a_n^7}-\frac{108a_{n-1}^5a_{n-3}a_{n-10}}{a_n^7}-\frac{108a_{n-1}^5a_{n-4}a_{n-9}}{a_n^7}-$$
$$\frac{108a_{n-1}^5a_{n-5}a_{n-8}}{a_n^7}-\frac{108a_{n-1}^5a_{n-6}a_{n-7}}{a_n^7}-\frac{108a_{n-1}a_{n-2}a_{n-3}^5}{a_n^7}-\frac{108a_{n-1}a_{n-2}^5a_{n-7}}{a_n^7}-$$
$$\frac{108a_{n-2}^5a_{n-3}a_{n-5}}{a_n^7}+\frac{126a_{n-1}^6a_{n-2}a_{n-10}}{a_n^8}+\frac{126a_{n-1}^6a_{n-3}a_{n-9}}{a_n^8}+\frac{126a_{n-1}^6a_{n-4}a_{n-8}}{a_n^8}+$$
$$\frac{126a_{n-1}^6a_{n-5}a_{n-7}}{a_n^8}+\frac{126a_{n-1}a_{n-2}^6a_{n-5}}{a_n^8}-\frac{144a_{n-1}^7a_{n-2}a_{n-9}}{a_n^9}-\frac{144a_{n-1}^7a_{n-3}a_{n-8}}{a_n^9}-$$
$$\frac{144a_{n-1}^7a_{n-4}a_{n-7}}{a_n^9}-\frac{144a_{n-1}^7a_{n-5}a_{n-6}}{a_n^9}-\frac{144a_{n-1}a_{n-2}^7a_{n-3}}{a_n^9}+\frac{162a_{n-1}^8a_{n-2}a_{n-8}}{a_n^{10}}+$$
$$\frac{162a_{n-1}^8a_{n-3}a_{n-7}}{a_n^{10}}+\frac{162a_{n-1}^8a_{n-4}a_{n-6}}{a_n^{10}}-\frac{180a_{n-1}^9a_{n-2}a_{n-7}}{a_n^{11}}-\frac{180a_{n-1}^9a_{n-3}a_{n-6}}{a_n^{11}}-$$
$$\frac{180a_{n-1}^9a_{n-4}a_{n-5}}{a_n^{11}}+\frac{198a_{n-1}^{10}a_{n-2}a_{n-6}}{a_n^{12}}+\frac{198a_{n-1}^{10}a_{n-3}a_{n-5}}{a_n^{12}}-\frac{216a_{n-1}^{11}a_{n-2}a_{n-5}}{a_n^{13}}-$$
$$\frac{216a_{n-1}^{11}a_{n-3}a_{n-4}}{a_n^{13}}+\frac{234a_{n-1}^{12}a_{n-2}a_{n-4}}{a_n^{14}}-\frac{252a_{n-1}^{13}a_{n-2}a_{n-3}}{a_n^{15}}-\frac{108a_{n-1}^2a_{n-4}a_{n-6}^2}{a_n^5}-$$
$$\frac{108a_{n-1}^2a_{n-2}^2a_{n-12}}{a_n^5}-\frac{108a_{n-1}^2a_{n-3}^2a_{n-10}}{a_n^5}-\frac{108a_{n-1}^2a_{n-4}^2a_{n-8}}{a_n^5}-\frac{108a_{n-1}^2a_{n-5}^2a_{n-6}}{a_n^5}-$$
$$\frac{108a_{n-1}^2a_{n-2}a_{n-7}^2}{a_n^5}-\frac{108a_{n-2}^2a_{n-3}^2a_{n-8}}{a_n^5}-\frac{108a_{n-2}^2a_{n-4}^2a_{n-6}}{a_n^5}-\frac{108a_{n-2}^2a_{n-4}a_{n-5}^2}{a_n^5}-$$
$$\frac{108a_{n-2}a_{n-3}^2a_{n-5}^2}{a_n^5}+\frac{180a_{n-1}^3a_{n-3}a_{n-6}^2}{a_n^6}+\frac{180a_{n-1}^3a_{n-2}^2a_{n-11}}{a_n^6}+\frac{180a_{n-1}^3a_{n-3}^2a_{n-9}}{a_n^6}+$$
$$\frac{180a_{n-1}^3a_{n-4}^2a_{n-7}}{a_n^6}+\frac{180a_{n-1}^2a_{n-2}^3a_{n-10}}{a_n^6}+\frac{180a_{n-1}^2a_{n-3}^3a_{n-7}}{a_n^6}+\frac{180a_{n-1}a_{n-3}^3a_{n-4}^2}{a_n^6}+$$
$$\frac{180a_{n-2}^3a_{n-3}^2a_{n-6}}{a_n^6}+\frac{180a_{n-2}^2a_{n-3}^3a_{n-5}}{a_n^6}-\frac{270a_{n-1}^4a_{n-2}^2a_{n-10}}{a_n^7}-\frac{270a_{n-1}^4a_{n-3}^2a_{n-8}}{a_n^7}-$$
$$\frac{270a_{n-1}^4a_{n-4}^2a_{n-6}}{a_n^7}-\frac{270a_{n-1}^4a_{n-4}a_{n-5}^2}{a_n^7}-\frac{270a_{n-1}^4a_{n-2}a_{n-6}^2}{a_n^7}-\frac{270a_{n-1}^2a_{n-2}^4a_{n-8}}{a_n^7}-$$
$$\frac{270a_{n-1}^2a_{n-3}^4a_{n-4}}{a_n^7}-\frac{270a_{n-2}^4a_{n-3}^2a_{n-4}}{a_n^7}+\frac{378a_{n-1}^5a_{n-2}^2a_{n-9}}{a_n^8}+\frac{378a_{n-1}^5a_{n-3}^2a_{n-7}}{a_n^8}+$$
$$\frac{378a_{n-1}^5a_{n-4}^2a_{n-5}}{a_n^8}+\frac{378a_{n-1}^5a_{n-3}a_{n-5}^2}{a_n^8}+\frac{378a_{n-1}^2a_{n-2}^5a_{n-6}}{a_n^8}-\frac{504a_{n-1}^6a_{n-2}^2a_{n-8}}{a_n^9}-$$
$$\frac{504a_{n-1}^6a_{n-3}^2a_{n-6}}{a_n^9}-\frac{504a_{n-1}^6a_{n-2}a_{n-5}^2}{a_n^9}-\frac{504a_{n-1}^2a_{n-2}^6a_{n-4}}{a_n^9}+\frac{648a_{n-1}^7a_{n-2}^2a_{n-7}}{a_n^{10}}+$$

$$\frac{648a_{n-1}^{7}a_{n-3}^{2}a_{n-5}}{a_n^{10}}+\frac{648a_{n-1}^{7}a_{n-3}a_{n-4}^{2}}{a_n^{10}}-\frac{810a_{n-1}^{8}a_{n-2}^{2}a_{n-6}}{a_n^{11}}-\frac{810a_{n-1}^{8}a_{n-3}^{2}a_{n-4}}{a_n^{11}}-\frac{810a_{n-1}^{8}a_{n-2}a_{n-4}^{2}}{a_n^{11}}+\frac{990a_{n-1}^{9}a_{n-2}^{2}a_{n-5}}{a_n^{12}}-\frac{1188a_{n-1}^{10}a_{n-2}^{2}a_{n-4}}{a_n^{13}}-\frac{1188a_{n-1}^{10}a_{n-2}a_{n-3}^{2}}{a_n^{13}}+\frac{1404a_{n-1}^{11}a_{n-2}^{2}a_{n-3}}{a_n^{14}}-\frac{360a_{n-1}^{3}a_{n-3}a_{n-4}^{3}}{a_n^{7}}-\frac{360a_{n-1}^{3}a_{n-2}^{3}a_{n-9}}{a_n^{7}}-\frac{360a_{n-1}^{3}a_{n-3}^{3}a_{n-6}}{a_n^{7}}+\frac{630a_{n-1}^{4}a_{n-2}a_{n-4}^{3}}{a_n^{8}}+\frac{630a_{n-1}^{4}a_{n-2}^{3}a_{n-8}}{a_n^{8}}+\frac{630a_{n-1}^{4}a_{n-3}^{3}a_{n-5}}{a_n^{8}}+\frac{630a_{n-1}^{3}a_{n-2}^{4}a_{n-7}}{a_n^{8}}+\frac{630a_{n-1}a_{n-2}^{4}a_{n-3}^{3}}{a_n^{8}}-\frac{1008a_{n-1}^{5}a_{n-2}^{3}a_{n-7}}{a_n^{9}}-\frac{1008a_{n-1}^{5}a_{n-3}^{3}a_{n-4}}{a_n^{9}}-\frac{1008a_{n-1}^{3}a_{n-2}^{5}a_{n-5}}{a_n^{9}}+\frac{1512a_{n-1}^{6}a_{n-2}^{3}a_{n-6}}{a_n^{10}}+\frac{1512a_{n-1}^{3}a_{n-2}^{6}a_{n-3}}{a_n^{10}}-\frac{2160a_{n-1}^{7}a_{n-2}^{3}a_{n-5}}{a_n^{11}}-\frac{2160a_{n-1}^{7}a_{n-2}a_{n-3}^{3}}{a_n^{11}}+\frac{2970a_{n-1}^{8}a_{n-2}^{3}a_{n-4}}{a_n^{12}}-\frac{3960a_{n-1}^{9}a_{n-2}^{3}a_{n-3}}{a_n^{13}}-\frac{1260a_{n-1}^{4}a_{n-2}a_{n-3}^{4}}{a_n^{9}}-\frac{1260a_{n-1}^{4}a_{n-2}^{4}a_{n-6}}{a_n^{9}}+\frac{2268a_{n-1}^{5}a_{n-2}^{4}a_{n-5}}{a_n^{10}}+\frac{2268a_{n-1}^{4}a_{n-2}^{5}a_{n-4}}{a_n^{10}}-\frac{3780a_{n-1}^{6}a_{n-2}^{4}a_{n-4}}{a_n^{11}}+\frac{5940a_{n-1}^{7}a_{n-2}^{4}a_{n-3}}{a_n^{12}}-\frac{4536a_{n-1}^{5}a_{n-2}^{5}a_{n-3}}{a_n^{11}}+\frac{270a_{n-1}^{2}a_{n-2}^{2}a_{n-6}^{2}}{a_n^{6}}+\frac{270a_{n-1}^{2}a_{n-3}^{2}a_{n-5}^{2}}{a_n^{6}}+\frac{270a_{n-2}^{2}a_{n-3}^{2}a_{n-4}^{2}}{a_n^{6}}-\frac{540a_{n-1}^{2}a_{n-2}^{2}a_{n-4}^{3}}{a_n^{7}}-\frac{540a_{n-1}^{2}a_{n-2}^{3}a_{n-5}^{2}}{a_n^{7}}+\frac{945a_{n-1}^{4}a_{n-2}^{2}a_{n-5}^{2}}{a_n^{8}}+\frac{945a_{n-1}^{4}a_{n-3}^{2}a_{n-4}^{2}}{a_n^{8}}+\frac{945a_{n-1}^{2}a_{n-2}^{2}a_{n-3}^{4}}{a_n^{8}}+\frac{945a_{n-1}^{2}a_{n-2}^{4}a_{n-4}^{2}}{a_n^{8}}-\frac{1512a_{n-1}^{2}a_{n-2}^{5}a_{n-3}^{2}}{a_n^{9}}+\frac{2268a_{n-1}^{6}a_{n-2}^{2}a_{n-4}^{2}}{a_n^{10}}+\frac{4455a_{n-1}^{8}a_{n-2}^{2}a_{n-3}^{2}}{a_n^{12}}-\frac{2520a_{n-1}^{4}a_{n-2}^{3}a_{n-4}^{2}}{a_n^{9}}+\frac{4536a_{n-1}^{5}a_{n-2}^{2}a_{n-3}^{3}}{a_n^{10}}-\frac{7560a_{n-1}^{6}a_{n-2}^{3}a_{n-3}^{2}}{a_n^{11}}+\frac{5670a_{n-1}^{4}a_{n-2}^{4}a_{n-3}^{2}}{a_n^{10}}-\frac{3360a_{n-1}^{3}a_{n-2}^{3}a_{n-3}^{3}}{a_n^{9}}+\frac{108a_{n-1}a_{n-2}a_{n-3}a_{n-12}}{a_n^{4}}+\frac{108a_{n-1}a_{n-2}a_{n-4}a_{n-11}}{a_n^{4}}+\frac{108a_{n-1}a_{n-2}a_{n-5}a_{n-10}}{a_n^{4}}+\frac{108a_{n-1}a_{n-2}a_{n-6}a_{n-9}}{a_n^{4}}+\frac{108a_{n-1}a_{n-2}a_{n-7}a_{n-8}}{a_n^{4}}+\frac{108a_{n-1}a_{n-3}a_{n-4}a_{n-10}}{a_n^{4}}+\frac{108a_{n-1}a_{n-3}a_{n-5}a_{n-9}}{a_n^{4}}+\frac{108a_{n-1}a_{n-3}a_{n-6}a_{n-8}}{a_n^{4}}+\frac{108a_{n-1}a_{n-4}a_{n-5}a_{n-8}}{a_n^{4}}+\frac{108a_{n-1}a_{n-4}a_{n-6}a_{n-7}}{a_n^{4}}+\frac{108a_{n-2}a_{n-3}a_{n-4}a_{n-9}}{a_n^{4}}+\frac{108a_{n-2}a_{n-3}a_{n-5}a_{n-8}}{a_n^{4}}+\frac{108a_{n-2}a_{n-3}a_{n-6}a_{n-7}}{a_n^{4}}+\frac{108a_{n-2}a_{n-4}a_{n-5}a_{n-7}}{a_n^{4}}+\frac{108a_{n-3}a_{n-4}a_{n-5}a_{n-6}}{a_n^{4}}-\frac{216a_{n-1}^{2}a_{n-2}a_{n-3}a_{n-11}}{a_n^{5}}-\frac{216a_{n-1}^{2}a_{n-2}a_{n-4}a_{n-10}}{a_n^{5}}-\frac{216a_{n-1}^{2}a_{n-2}a_{n-5}a_{n-9}}{a_n^{5}}-\frac{216a_{n-1}^{2}a_{n-2}a_{n-6}a_{n-8}}{a_n^{5}}-\frac{216a_{n-1}^{2}a_{n-3}a_{n-4}a_{n-9}}{a_n^{5}}-\frac{216a_{n-1}^{2}a_{n-3}a_{n-5}a_{n-8}}{a_n^{5}}-\frac{216a_{n-1}^{2}a_{n-3}a_{n-6}a_{n-7}}{a_n^{5}}-\frac{216a_{n-1}^{2}a_{n-4}a_{n-5}a_{n-7}}{a_n^{5}}-\frac{216a_{n-1}a_{n-1}^{2}a_{n-2}a_{n-3}a_{n-10}}{a_n^{5}}-\frac{216a_{n-1}a_{n-1}^{2}a_{n-2}a_{n-4}a_{n-9}}{a_n^{5}}-\frac{216a_{n-1}a_{n-1}^{2}a_{n-2}a_{n-5}a_{n-8}}{a_n^{5}}-\frac{216a_{n-1}a_{n-1}^{2}a_{n-2}a_{n-6}a_{n-7}}{a_n^{5}}-\frac{216a_{n-1}a_{n-2}a_{n-3}^{2}a_{n-9}}{a_n^{5}}-\frac{216a_{n-1}a_{n-3}^{2}a_{n-4}a_{n-7}}{a_n^{5}}-\frac{216a_{n-1}a_{n-3}^{2}a_{n-5}a_{n-6}}{a_n^{5}}-\frac{216a_{n-1}a_{n-2}a_{n-4}^{2}a_{n-7}}{a_n^{5}}-\frac{216a_{n-1}a_{n-3}a_{n-4}^{2}a_{n-6}}{a_n^{5}}-\frac{216a_{n-1}a_{n-3}a_{n-4}a_{n-5}^{2}}{a_n^{5}}-\frac{216a_{n-1}a_{n-2}a_{n-3}a_{n-6}^{2}}{a_n^{5}}-$$

$$\frac{216a_{n-2}^2a_{n-3}a_{n-4}a_{n-7}}{a_n^5}-\frac{216a_{n-2}^2a_{n-3}a_{n-5}a_{n-6}}{a_n^5}-\frac{216a_{n-2}a_{n-3}^2a_{n-4}a_{n-6}}{a_n^5}-$$
$$\frac{216a_{n-2}a_{n-3}a_{n-4}^2a_{n-5}}{a_n^5}+\frac{360a_{n-1}^3a_{n-2}a_{n-3}a_{n-10}}{a_n^6}+\frac{360a_{n-1}^3a_{n-2}a_{n-4}a_{n-9}}{a_n^6}+$$
$$\frac{360a_{n-1}^3a_{n-2}a_{n-5}a_{n-8}}{a_n^6}+\frac{360a_{n-1}^3a_{n-2}a_{n-6}a_{n-7}}{a_n^6}+\frac{360a_{n-1}^3a_{n-3}a_{n-4}a_{n-8}}{a_n^6}+$$
$$\frac{360a_{n-1}^3a_{n-3}a_{n-5}a_{n-7}}{a_n^6}+\frac{360a_{n-1}^3a_{n-4}a_{n-5}a_{n-6}}{a_n^6}+\frac{360a_{n-1}a_{n-2}^3a_{n-3}a_{n-8}}{a_n^6}+$$
$$\frac{360a_{n-1}a_{n-2}^3a_{n-4}a_{n-7}}{a_n^6}+\frac{360a_{n-1}a_{n-2}^3a_{n-5}a_{n-6}}{a_n^6}+\frac{360a_{n-1}a_{n-2}a_{n-3}^3a_{n-6}}{a_n^6}+$$
$$\frac{360a_{n-1}a_{n-2}a_{n-3}a_{n-4}^3}{a_n^6}+\frac{360a_{n-2}^3a_{n-3}a_{n-4}a_{n-5}}{a_n^6}-\frac{540a_{n-1}^4a_{n-2}a_{n-3}a_{n-9}}{a_n^7}-$$
$$\frac{540a_{n-1}^4a_{n-2}a_{n-4}a_{n-8}}{a_n^7}-\frac{540a_{n-1}^4a_{n-2}a_{n-5}a_{n-7}}{a_n^7}-\frac{540a_{n-1}^4a_{n-3}a_{n-4}a_{n-7}}{a_n^7}-$$
$$\frac{540a_{n-1}^4a_{n-3}a_{n-5}a_{n-6}}{a_n^7}-\frac{540a_{n-1}a_{n-2}^4a_{n-3}a_{n-6}}{a_n^7}-\frac{540a_{n-1}a_{n-2}^4a_{n-4}a_{n-5}}{a_n^7}+$$
$$\frac{756a_{n-1}^5a_{n-2}a_{n-3}a_{n-8}}{a_n^8}+\frac{756a_{n-1}^5a_{n-2}a_{n-4}a_{n-7}}{a_n^8}+\frac{756a_{n-1}^5a_{n-2}a_{n-5}a_{n-6}}{a_n^8}+$$
$$\frac{756a_{n-1}^5a_{n-3}a_{n-4}a_{n-6}}{a_n^8}+\frac{756a_{n-1}a_{n-2}^5a_{n-3}a_{n-4}}{a_n^8}-\frac{1008a_{n-1}^6a_{n-2}a_{n-3}a_{n-7}}{a_n^9}-$$
$$\frac{1008a_{n-1}^6a_{n-2}a_{n-4}a_{n-6}}{a_n^9}-\frac{1008a_{n-1}^6a_{n-3}a_{n-4}a_{n-5}}{a_n^9}+\frac{1296a_{n-1}^7a_{n-2}a_{n-3}a_{n-6}}{a_n^{10}}+$$
$$\frac{1296a_{n-1}^7a_{n-2}a_{n-4}a_{n-5}}{a_n^{10}}-\frac{1620a_{n-1}^8a_{n-2}a_{n-3}a_{n-5}}{a_n^{11}}+\frac{1980a_{n-1}^9a_{n-2}a_{n-3}a_{n-4}}{a_n^{12}}+$$
$$\frac{540a_{n-1}^2a_{n-2}^2a_{n-3}a_{n-9}}{a_n^6}+\frac{540a_{n-1}^2a_{n-2}^2a_{n-4}a_{n-8}}{a_n^6}+\frac{540a_{n-1}^2a_{n-2}^2a_{n-5}a_{n-7}}{a_n^6}+$$
$$\frac{540a_{n-1}^2a_{n-2}a_{n-3}^2a_{n-8}}{a_n^6}+\frac{540a_{n-1}^2a_{n-2}^2a_{n-3}a_{n-4}a_{n-6}}{a_n^6}+\frac{540a_{n-1}^2a_{n-2}a_{n-4}^2a_{n-6}}{a_n^6}+$$
$$\frac{540a_{n-1}^2a_{n-3}a_{n-4}^2a_{n-5}}{a_n^6}+\frac{540a_{n-1}^2a_{n-2}a_{n-4}a_{n-5}^2}{a_n^6}+\frac{540a_{n-1}a_{n-2}^2a_{n-3}^2a_{n-7}}{a_n^6}+$$
$$\frac{540a_{n-1}a_{n-2}^2a_{n-4}^2a_{n-5}}{a_n^6}+\frac{540a_{n-1}a_{n-2}^2a_{n-3}a_{n-5}^2}{a_n^6}-\frac{1080a_{n-1}^3a_{n-2}^2a_{n-3}a_{n-8}}{a_n^7}-$$
$$\frac{1080a_{n-1}^3a_{n-2}^2a_{n-4}a_{n-7}}{a_n^7}-\frac{1080a_{n-1}^3a_{n-2}^2a_{n-5}a_{n-6}}{a_n^7}-\frac{1080a_{n-1}^3a_{n-2}a_{n-3}^2a_{n-7}}{a_n^7}-$$
$$\frac{1080a_{n-1}^3a_{n-3}^2a_{n-4}a_{n-5}}{a_n^7}-\frac{1080a_{n-1}^3a_{n-2}a_{n-4}^2a_{n-5}}{a_n^7}-\frac{1080a_{n-1}^3a_{n-2}a_{n-3}a_{n-5}^2}{a_n^7}-$$
$$\frac{1080a_{n-1}^2a_{n-2}^3a_{n-3}a_{n-7}}{a_n^7}-\frac{1080a_{n-1}^2a_{n-2}^3a_{n-4}a_{n-6}}{a_n^7}-\frac{1080a_{n-1}^2a_{n-2}a_{n-3}^3a_{n-5}}{a_n^7}-$$
$$\frac{1080a_{n-1}a_{n-2}^3a_{n-3}^2a_{n-5}}{a_n^7}-\frac{1080a_{n-1}a_{n-2}^3a_{n-3}a_{n-4}^2}{a_n^7}-\frac{1080a_{n-1}a_{n-2}^2a_{n-3}^3a_{n-4}}{a_n^7}+$$
$$\frac{1890a_{n-1}^4a_{n-2}^2a_{n-3}a_{n-7}}{a_n^8}+\frac{1890a_{n-1}^4a_{n-2}^2a_{n-4}a_{n-6}}{a_n^8}+\frac{1890a_{n-1}^4a_{n-2}a_{n-3}^2a_{n-6}}{a_n^8}+$$
$$\frac{1890a_{n-1}^2a_{n-2}^4a_{n-3}a_{n-5}}{a_n^8}-\frac{3024a_{n-1}^5a_{n-2}^2a_{n-3}a_{n-6}}{a_n^9}-\frac{3024a_{n-1}^5a_{n-2}^2a_{n-4}a_{n-5}}{a_n^9}-$$
$$\frac{3024a_{n-1}^5a_{n-2}a_{n-3}^2a_{n-5}}{a_n^9}-\frac{3024a_{n-1}^5a_{n-2}a_{n-3}a_{n-4}^2}{a_n^9}+\frac{4536a_{n-1}^6a_{n-2}^2a_{n-3}a_{n-5}}{a_n^{10}}+$$
$$\frac{4536a_{n-1}^6a_{n-2}a_{n-3}^2a_{n-4}}{a_n^{10}}-\frac{6480a_{n-1}^7a_{n-2}^2a_{n-3}a_{n-4}}{a_n^{11}}+\frac{2520a_{n-1}^3a_{n-2}^3a_{n-3}a_{n-6}}{a_n^8}+$$

$$\frac{2520a_{n-1}^3a_{n-2}^3a_{n-4}a_{n-5}}{a_n^8}+\frac{2520a_{n-1}^3a_{n-2}a_{n-3}^3a_{n-4}}{a_n^8}-\frac{5040a_{n-1}^4a_{n-2}^3a_{n-3}a_{n-5}}{a_n^9}-\frac{5040a_{n-1}^3a_{n-2}^4a_{n-3}a_{n-4}}{a_n^9}+\frac{9072a_{n-1}^5a_{n-2}^3a_{n-3}a_{n-4}}{a_n^{10}}-\frac{1620a_{n-1}^2a_{n-2}^2a_{n-3}^2a_{n-6}}{a_n^7}-\frac{1620a_{n-1}^2a_{n-2}a_{n-3}^2a_{n-4}^2}{a_n^7}+\frac{3780a_{n-1}^3a_{n-2}^2a_{n-3}^2a_{n-5}}{a_n^8}+\frac{3780a_{n-1}^3a_{n-2}^2a_{n-3}a_{n-4}^2}{a_n^8}+\frac{3780a_{n-1}^2a_{n-2}^3a_{n-3}^2a_{n-4}}{a_n^8}-\frac{7560a_{n-1}^4a_{n-2}^2a_{n-3}^2a_{n-4}}{a_n^9}-\frac{432a_{n-1}a_{n-2}a_{n-3}a_{n-4}a_{n-8}}{a_n^5}-\frac{432a_{n-1}a_{n-2}a_{n-3}a_{n-5}a_{n-7}}{a_n^5}-\frac{432a_{n-1}a_{n-2}a_{n-4}a_{n-5}a_{n-6}}{a_n^5}+\frac{1080a_{n-1}^2a_{n-2}a_{n-3}a_{n-4}a_{n-7}}{a_n^6}+\frac{1080a_{n-1}^2a_{n-2}a_{n-3}a_{n-5}a_{n-6}}{a_n^6}+\frac{1080a_{n-1}a_{n-2}^2a_{n-3}a_{n-4}a_{n-6}}{a_n^6}+\frac{1080a_{n-1}a_{n-2}a_{n-3}^2a_{n-4}a_{n-5}}{a_n^6}-\frac{1080a_{n-1}^3a_{n-2}a_{n-3}a_{n-4}a_{n-6}}{a_n^7}+\frac{3780a_{n-1}^4a_{n-2}a_{n-3}a_{n-4}a_{n-5}}{a_n^8}-\frac{3240a_{n-1}^2a_{n-2}^2a_{n-3}a_{n-4}a_{n-5}}{a_n^7}$$

$$\sum_{k=1}^{n} z_k^{19}=-\frac{19a_{n-19}}{a_n}-\frac{a_{n-1}^{19}}{a_n^{19}}+\frac{19a_{n-1}a_{n-18}}{a_n^2}+\frac{19a_{n-2}a_{n-17}}{a_n^2}+\frac{19a_{n-3}a_{n-16}}{a_n^2}+\frac{19a_{n-4}a_{n-15}}{a_n^2}+\frac{19a_{n-5}a_{n-14}}{a_n^2}+\frac{19a_{n-6}a_{n-13}}{a_n^2}+\frac{19a_{n-7}a_{n-12}}{a_n^2}+\frac{19a_{n-8}a_{n-11}}{a_n^2}+\frac{19a_{n-9}a_{n-10}}{a_n^2}-\frac{19a_{n-1}^2a_{n-17}}{a_n^3}-\frac{19a_{n-1}a_{n-9}^2}{a_n^3}-\frac{19a_{n-3}a_{n-8}^2}{a_n^3}-\frac{19a_{n-2}^2a_{n-15}}{a_n^3}-\frac{19a_{n-3}^2a_{n-13}}{a_n^3}-\frac{19a_{n-4}^2a_{n-11}}{a_n^3}-\frac{19a_{n-5}^2a_{n-9}}{a_n^3}-\frac{19a_{n-6}^2a_{n-7}}{a_n^3}-\frac{19a_{n-5}a_{n-7}^2}{a_n^3}+\frac{19a_{n-1}^3a_{n-16}}{a_n^4}+\frac{19a_{n-1}a_{n-6}^3}{a_n^4}+\frac{19a_{n-2}^3a_{n-13}}{a_n^4}+\frac{19a_{n-3}^3a_{n-10}}{a_n^4}+\frac{19a_{n-4}^3a_{n-7}}{a_n^4}+\frac{19a_{n-4}a_{n-5}^3}{a_n^4}-\frac{19a_{n-1}^4a_{n-15}}{a_n^5}-\frac{19a_{n-3}a_{n-4}^4}{a_n^5}-\frac{19a_{n-2}^4a_{n-11}}{a_n^5}-\frac{19a_{n-3}^4a_{n-7}}{a_n^5}+\frac{19a_{n-1}^5a_{n-14}}{a_n^6}+\frac{19a_{n-2}^5a_{n-9}}{a_n^6}+\frac{19a_{n-3}^5a_{n-4}}{a_n^6}-\frac{19a_{n-1}^6a_{n-13}}{a_n^7}-\frac{19a_{n-1}a_{n-3}^6}{a_n^7}-\frac{19a_{n-2}^6a_{n-7}}{a_n^7}+\frac{19a_{n-1}^7a_{n-12}}{a_n^8}+\frac{19a_{n-2}^7a_{n-5}}{a_n^8}-\frac{19a_{n-1}^8a_{n-11}}{a_n^9}-\frac{19a_{n-2}^8a_{n-3}}{a_n^9}+\frac{19a_{n-1}^9a_{n-10}}{a_n^{10}}+\frac{19a_{n-1}a_{n-2}^9}{a_n^{10}}-\frac{19a_{n-1}^{10}a_{n-9}}{a_n^{11}}+\frac{19a_{n-1}^{11}a_{n-8}}{a_n^{12}}-\frac{19a_{n-1}^{12}a_{n-7}}{a_n^{13}}+\frac{19a_{n-1}^{13}a_{n-6}}{a_n^{14}}-\frac{19a_{n-1}^{14}a_{n-5}}{a_n^{15}}+\frac{19a_{n-1}^{15}a_{n-4}}{a_n^{16}}-\frac{19a_{n-1}^{16}a_{n-3}}{a_n^{17}}+\frac{19a_{n-1}^{17}a_{n-2}}{a_n^{18}}-\frac{38a_{n-1}^3a_{n-8}^2}{a_n^5}-\frac{38a_{n-3}^3a_{n-5}^2}{a_n^5}-\frac{38a_{n-2}^2a_{n-5}^3}{a_n^5}-\frac{57a_{n-1}^5a_{n-7}^2}{a_n^7}-\frac{57a_{n-2}^2a_{n-3}^5}{a_n^7}-\frac{76a_{n-1}^7a_{n-6}^2}{a_n^9}-\frac{95a_{n-1}^9a_{n-5}^2}{a_n^{11}}-\frac{114a_{n-1}^{11}a_{n-4}^2}{a_n^{13}}-\frac{133a_{n-1}^{13}a_{n-3}^2}{a_n^{15}}-\frac{152a_{n-1}^{15}a_{n-2}^2}{a_n^{17}}-\frac{95a_{n-1}^4a_{n-5}^3}{a_n^7}-\frac{95a_{n-1}^3a_{n-4}^4}{a_n^7}+\frac{133a_{n-2}^5a_{n-3}^3}{a_n^8}+\frac{228a_{n-1}^7a_{n-4}^3}{a_n^{10}}-\frac{285a_{n-1}^3a_{n-2}^8}{a_n^{11}}-\frac{418a_{n-1}^{10}a_{n-3}^3}{a_n^{13}}+\frac{665a_{n-1}^{13}a_{n-2}^3}{a_n^{16}}-\frac{266a_{n-1}^4a_{n-3}^5}{a_n^9}-\frac{570a_{n-1}^7a_{n-3}^4}{a_n^{11}}-\frac{1729a_{n-1}^{11}a_{n-2}^4}{a_n^{15}}+\frac{1254a_{n-1}^5a_{n-2}^7}{a_n^{12}}+\frac{2717a_{n-1}^9a_{n-2}^5}{a_n^{14}}-\frac{2508a_{n-1}^7a_{n-2}^6}{a_n^{13}}-\frac{38a_{n-1}a_{n-2}a_{n-16}}{a_n^3}-\frac{38a_{n-1}a_{n-3}a_{n-15}}{a_n^3}-$$

$$\frac{38a_{n-1}a_{n-4}a_{n-14}}{a_n^3} - \frac{38a_{n-1}a_{n-5}a_{n-13}}{a_n^3} - \frac{38a_{n-1}a_{n-6}a_{n-12}}{a_n^3} - \frac{38a_{n-1}a_{n-7}a_{n-11}}{a_n^3} -$$
$$\frac{38a_{n-1}a_{n-8}a_{n-10}}{a_n^3} - \frac{38a_{n-2}a_{n-3}a_{n-14}}{a_n^3} - \frac{38a_{n-2}a_{n-4}a_{n-13}}{a_n^3} - \frac{38a_{n-2}a_{n-5}a_{n-12}}{a_n^3} -$$
$$\frac{38a_{n-2}a_{n-6}a_{n-11}}{a_n^3} - \frac{38a_{n-2}a_{n-7}a_{n-10}}{a_n^3} - \frac{38a_{n-2}a_{n-8}a_{n-9}}{a_n^3} - \frac{38a_{n-3}a_{n-4}a_{n-12}}{a_n^3} -$$
$$\frac{38a_{n-3}a_{n-5}a_{n-11}}{a_n^3} - \frac{38a_{n-3}a_{n-6}a_{n-10}}{a_n^3} - \frac{38a_{n-3}a_{n-7}a_{n-9}}{a_n^3} - \frac{38a_{n-4}a_{n-5}a_{n-10}}{a_n^3} -$$
$$\frac{38a_{n-4}a_{n-6}a_{n-9}}{a_n^3} - \frac{38a_{n-4}a_{n-7}a_{n-8}}{a_n^3} - \frac{38a_{n-5}a_{n-6}a_{n-8}}{a_n^3} + \frac{57a_{n-1}^2a_{n-2}a_{n-15}}{a_n^4} +$$
$$\frac{57a_{n-1}^2a_{n-3}a_{n-14}}{a_n^4} + \frac{57a_{n-1}^2a_{n-4}a_{n-13}}{a_n^4} + \frac{57a_{n-1}^2a_{n-5}a_{n-12}}{a_n^4} + \frac{57a_{n-1}^2a_{n-6}a_{n-11}}{a_n^4} +$$
$$\frac{57a_{n-1}^2a_{n-7}a_{n-10}}{a_n^4} + \frac{57a_{n-1}^2a_{n-8}a_{n-9}}{a_n^4} + \frac{57a_{n-1}a_{n-2}a_{n-8}^2}{a_n^4} + \frac{57a_{n-1}a_{n-2}^2a_{n-14}}{a_n^4} +$$
$$\frac{57a_{n-1}a_{n-3}^2a_{n-12}}{a_n^4} + \frac{57a_{n-1}a_{n-4}^2a_{n-10}}{a_n^4} + \frac{57a_{n-1}a_{n-5}^2a_{n-8}}{a_n^4} + \frac{57a_{n-1}a_{n-4}a_{n-7}^2}{a_n^4} +$$
$$\frac{57a_{n-2}^2a_{n-3}a_{n-12}}{a_n^4} + \frac{57a_{n-2}^2a_{n-4}a_{n-11}}{a_n^4} + \frac{57a_{n-2}^2a_{n-5}a_{n-10}}{a_n^4} + \frac{57a_{n-2}^2a_{n-6}a_{n-9}}{a_n^4} +$$
$$\frac{57a_{n-2}^2a_{n-7}a_{n-8}}{a_n^4} + \frac{57a_{n-2}a_{n-3}^2a_{n-11}}{a_n^4} + \frac{57a_{n-3}^2a_{n-4}a_{n-9}}{a_n^4} + \frac{57a_{n-3}^2a_{n-5}a_{n-8}}{a_n^4} +$$
$$\frac{57a_{n-3}^2a_{n-6}a_{n-7}}{a_n^4} + \frac{57a_{n-2}a_{n-4}^2a_{n-9}}{a_n^4} + \frac{57a_{n-3}a_{n-4}^2a_{n-8}}{a_n^4} + \frac{57a_{n-4}^2a_{n-5}a_{n-6}}{a_n^4} +$$
$$\frac{57a_{n-2}a_{n-5}^2a_{n-7}}{a_n^4} + \frac{57a_{n-3}a_{n-5}^2a_{n-6}}{a_n^4} + \frac{57a_{n-2}a_{n-5}a_{n-6}^2}{a_n^4} + \frac{57a_{n-3}a_{n-4}a_{n-6}^2}{a_n^4} +$$
$$\frac{57a_{n-2}a_{n-3}a_{n-7}^2}{a_n^4} - \frac{76a_{n-1}^3a_{n-2}a_{n-14}}{a_n^5} - \frac{76a_{n-1}^3a_{n-3}a_{n-13}}{a_n^5} - \frac{76a_{n-1}^3a_{n-4}a_{n-12}}{a_n^5} -$$
$$\frac{76a_{n-1}^3a_{n-5}a_{n-11}}{a_n^5} - \frac{76a_{n-1}^3a_{n-6}a_{n-10}}{a_n^5} - \frac{76a_{n-1}^3a_{n-7}a_{n-9}}{a_n^5} - \frac{76a_{n-1}a_{n-2}^3a_{n-12}}{a_n^5} -$$
$$\frac{76a_{n-1}a_{n-3}^3a_{n-9}}{a_n^5} - \frac{76a_{n-1}a_{n-4}^3a_{n-6}}{a_n^5} - \frac{76a_{n-1}a_{n-3}a_{n-5}^3}{a_n^5} - \frac{76a_{n-2}^3a_{n-3}a_{n-10}}{a_n^5} -$$
$$\frac{76a_{n-2}^3a_{n-4}a_{n-9}}{a_n^5} - \frac{76a_{n-2}^3a_{n-5}a_{n-8}}{a_n^5} - \frac{76a_{n-2}^3a_{n-6}a_{n-7}}{a_n^5} - \frac{76a_{n-2}a_{n-3}^3a_{n-8}}{a_n^5} -$$
$$\frac{76a_{n-3}^3a_{n-4}a_{n-6}}{a_n^5} - \frac{76a_{n-2}a_{n-4}^3a_{n-5}}{a_n^5} + \frac{95a_{n-1}^4a_{n-2}a_{n-13}}{a_n^6} + \frac{95a_{n-1}^4a_{n-3}a_{n-12}}{a_n^6} +$$
$$\frac{95a_{n-1}^4a_{n-4}a_{n-11}}{a_n^6} + \frac{95a_{n-1}^4a_{n-5}a_{n-10}}{a_n^6} + \frac{95a_{n-1}^4a_{n-6}a_{n-9}}{a_n^6} + \frac{95a_{n-1}^4a_{n-7}a_{n-8}}{a_n^6} +$$
$$\frac{95a_{n-1}a_{n-2}a_{n-4}^4}{a_n^6} + \frac{95a_{n-1}a_{n-2}^4a_{n-10}}{a_n^6} + \frac{95a_{n-1}a_{n-3}^4a_{n-6}}{a_n^6} + \frac{95a_{n-2}^4a_{n-3}a_{n-8}}{a_n^6} +$$
$$\frac{95a_{n-2}^4a_{n-4}a_{n-7}}{a_n^6} + \frac{95a_{n-2}^4a_{n-5}a_{n-6}}{a_n^6} + \frac{95a_{n-2}a_{n-3}^4a_{n-5}}{a_n^6} - \frac{114a_{n-1}^5a_{n-2}a_{n-12}}{a_n^7} -$$
$$\frac{114a_{n-1}^5a_{n-3}a_{n-11}}{a_n^7} - \frac{114a_{n-1}^5a_{n-4}a_{n-10}}{a_n^7} - \frac{114a_{n-1}^5a_{n-5}a_{n-9}}{a_n^7} - \frac{114a_{n-1}^5a_{n-6}a_{n-8}}{a_n^7} -$$
$$\frac{114a_{n-1}a_{n-2}^5a_{n-8}}{a_n^7} - \frac{114a_{n-2}^5a_{n-3}a_{n-6}}{a_n^7} - \frac{114a_{n-2}^5a_{n-4}a_{n-5}}{a_n^7} + \frac{133a_{n-1}^6a_{n-2}a_{n-11}}{a_n^8} +$$
$$\frac{133a_{n-1}^6a_{n-3}a_{n-10}}{a_n^8} + \frac{133a_{n-1}^6a_{n-4}a_{n-9}}{a_n^8} + \frac{133a_{n-1}^6a_{n-5}a_{n-8}}{a_n^8} + \frac{133a_{n-1}^6a_{n-6}a_{n-7}}{a_n^8} +$$
$$\frac{133a_{n-1}a_{n-2}^6a_{n-6}}{a_n^8} + \frac{133a_{n-2}^6a_{n-3}a_{n-4}}{a_n^8} - \frac{152a_{n-1}^7a_{n-2}a_{n-10}}{a_n^9} - \frac{152a_{n-1}^7a_{n-3}a_{n-9}}{a_n^9} -$$

$$\frac{152a_{n-1}^7a_{n-4}a_{n-8}}{a_n^9}-\frac{152a_{n-1}^7a_{n-5}a_{n-7}}{a_n^9}-\frac{152a_{n-1}a_{n-2}^7a_{n-4}}{a_n^9}+\frac{171a_{n-1}^8a_{n-2}a_{n-9}}{a_n^{10}}+$$
$$\frac{171a_{n-1}^8a_{n-3}a_{n-8}}{a_n^{10}}+\frac{171a_{n-1}^8a_{n-4}a_{n-7}}{a_n^{10}}+\frac{171a_{n-1}^8a_{n-5}a_{n-6}}{a_n^{10}}-\frac{190a_{n-1}^9a_{n-2}a_{n-8}}{a_n^{11}}-$$
$$\frac{190a_{n-1}^9a_{n-3}a_{n-7}}{a_n^{11}}-\frac{190a_{n-1}^9a_{n-4}a_{n-6}}{a_n^{11}}+\frac{209a_{n-1}^{10}a_{n-2}a_{n-7}}{a_n^{12}}+\frac{209a_{n-1}^{10}a_{n-3}a_{n-6}}{a_n^{12}}+$$
$$\frac{209a_{n-1}^{10}a_{n-4}a_{n-5}}{a_n^{12}}-\frac{228a_{n-1}^{11}a_{n-2}a_{n-6}}{a_n^{13}}-\frac{228a_{n-1}^{11}a_{n-3}a_{n-5}}{a_n^{13}}+\frac{247a_{n-1}^{12}a_{n-2}a_{n-5}}{a_n^{14}}+$$
$$\frac{247a_{n-1}^{12}a_{n-3}a_{n-4}}{a_n^{14}}-\frac{266a_{n-1}^{13}a_{n-2}a_{n-4}}{a_n^{15}}+\frac{285a_{n-1}^{14}a_{n-2}a_{n-3}}{a_n^{16}}-\frac{114a_{n-1}^2a_{n-5}a_{n-6}^2}{a_n^5}-$$
$$\frac{114a_{n-1}^2a_{n-2}^2a_{n-13}}{a_n^5}-\frac{114a_{n-1}^2a_{n-3}^2a_{n-11}}{a_n^5}-\frac{114a_{n-1}^2a_{n-4}^2a_{n-9}}{a_n^5}-\frac{114a_{n-1}^2a_{n-5}^2a_{n-7}}{a_n^5}-$$
$$\frac{114a_{n-1}^2a_{n-3}a_{n-7}^2}{a_n^5}-\frac{114a_{n-1}a_{n-2}^2a_{n-7}^2}{a_n^5}-\frac{114a_{n-1}a_{n-3}^2a_{n-6}^2}{a_n^5}-\frac{114a_{n-1}a_{n-4}^2a_{n-5}^2}{a_n^5}-$$
$$\frac{114a_{n-2}^2a_{n-3}^2a_{n-9}}{a_n^5}-\frac{114a_{n-2}^2a_{n-4}^2a_{n-7}}{a_n^5}-\frac{114a_{n-2}^2a_{n-3}a_{n-6}^2}{a_n^5}-\frac{114a_{n-3}^2a_{n-4}^2a_{n-5}}{a_n^5}+$$
$$\frac{190a_{n-1}^3a_{n-4}a_{n-6}^2}{a_n^6}+\frac{190a_{n-1}^3a_{n-2}^2a_{n-12}}{a_n^6}+\frac{190a_{n-1}^3a_{n-3}^2a_{n-10}}{a_n^6}+\frac{190a_{n-1}^3a_{n-4}^2a_{n-8}}{a_n^6}+$$
$$\frac{190a_{n-1}^3a_{n-5}^2a_{n-6}}{a_n^6}+\frac{190a_{n-1}^3a_{n-2}a_{n-7}^2}{a_n^6}+\frac{190a_{n-1}^2a_{n-2}^3a_{n-11}}{a_n^6}+\frac{190a_{n-1}^2a_{n-3}^3a_{n-8}}{a_n^6}+$$
$$\frac{190a_{n-1}^2a_{n-4}^3a_{n-5}}{a_n^6}+\frac{190a_{n-1}^2a_{n-2}a_{n-5}^3}{a_n^6}+\frac{190a_{n-1}a_{n-2}^3a_{n-6}^2}{a_n^6}+\frac{190a_{n-1}a_{n-3}^2a_{n-4}^3}{a_n^6}+$$
$$\frac{190a_{n-2}^3a_{n-3}^2a_{n-7}}{a_n^6}+\frac{190a_{n-2}^3a_{n-4}^2a_{n-5}}{a_n^6}+\frac{190a_{n-2}^2a_{n-3}^3a_{n-6}}{a_n^6}+\frac{190a_{n-2}^2a_{n-3}a_{n-4}^3}{a_n^6}+$$
$$\frac{190a_{n-2}^3a_{n-3}a_{n-5}^2}{a_n^6}+\frac{190a_{n-2}a_{n-3}^3a_{n-4}^2}{a_n^6}-\frac{285a_{n-1}^4a_{n-3}a_{n-6}^2}{a_n^7}-\frac{285a_{n-1}^4a_{n-2}^2a_{n-11}}{a_n^7}-$$
$$\frac{285a_{n-1}^4a_{n-3}^2a_{n-9}}{a_n^7}-\frac{285a_{n-1}^4a_{n-4}^2a_{n-7}}{a_n^7}-\frac{285a_{n-1}^2a_{n-2}^4a_{n-9}}{a_n^7}-\frac{285a_{n-1}^2a_{n-3}^4a_{n-5}}{a_n^7}-$$
$$\frac{285a_{n-1}a_{n-2}^4a_{n-5}^2}{a_n^7}-\frac{285a_{n-2}^4a_{n-3}^2a_{n-5}}{a_n^7}-\frac{285a_{n-2}^4a_{n-3}a_{n-4}^2}{a_n^7}+\frac{399a_{n-1}^5a_{n-2}^2a_{n-10}}{a_n^8}+$$
$$\frac{399a_{n-1}^5a_{n-3}^2a_{n-8}}{a_n^8}+\frac{399a_{n-1}^5a_{n-4}^2a_{n-6}}{a_n^8}+\frac{399a_{n-1}^5a_{n-4}a_{n-5}^2}{a_n^8}+\frac{399a_{n-1}^5a_{n-2}a_{n-6}^2}{a_n^8}+$$
$$\frac{399a_{n-1}^2a_{n-2}a_{n-3}^5}{a_n^8}+\frac{399a_{n-1}^2a_{n-2}^5a_{n-7}}{a_n^8}+\frac{399a_{n-1}a_{n-2}^5a_{n-4}^2}{a_n^8}-\frac{532a_{n-1}^6a_{n-2}^2a_{n-9}}{a_n^9}-$$
$$\frac{532a_{n-1}^6a_{n-3}^2a_{n-7}}{a_n^9}-\frac{532a_{n-1}^6a_{n-4}^2a_{n-5}}{a_n^9}-\frac{532a_{n-1}^6a_{n-3}a_{n-5}^2}{a_n^9}-\frac{532a_{n-1}^2a_{n-2}^6a_{n-5}}{a_n^9}-$$
$$\frac{532a_{n-1}a_{n-2}^6a_{n-3}^2}{a_n^9}+\frac{684a_{n-1}^7a_{n-2}^2a_{n-8}}{a_n^{10}}+\frac{684a_{n-1}^7a_{n-3}^2a_{n-6}}{a_n^{10}}+\frac{684a_{n-1}^7a_{n-2}a_{n-5}^2}{a_n^{10}}+$$
$$\frac{684a_{n-1}^2a_{n-2}^7a_{n-3}}{a_n^{10}}-\frac{855a_{n-1}^8a_{n-2}^2a_{n-7}}{a_n^{11}}-\frac{855a_{n-1}^8a_{n-3}^2a_{n-5}}{a_n^{11}}-\frac{855a_{n-1}^8a_{n-3}a_{n-4}^2}{a_n^{11}}+$$
$$\frac{1045a_{n-1}^9a_{n-2}^2a_{n-6}}{a_n^{12}}+\frac{1045a_{n-1}^9a_{n-3}^2a_{n-4}}{a_n^{12}}+\frac{1045a_{n-1}^9a_{n-2}a_{n-4}^2}{a_n^{12}}-\frac{1254a_{n-1}^{10}a_{n-2}^2a_{n-5}}{a_n^{13}}+$$
$$\frac{1482a_{n-1}^{11}a_{n-2}^2a_{n-4}}{a_n^{14}}+\frac{1482a_{n-1}^{11}a_{n-2}a_{n-3}^2}{a_n^{14}}-\frac{1729a_{n-1}^{12}a_{n-2}^2a_{n-3}}{a_n^{15}}-\frac{380a_{n-1}^3a_{n-2}^3a_{n-10}}{a_n^7}-$$
$$\frac{380a_{n-1}^3a_{n-3}^3a_{n-7}}{a_n^7}-\frac{380a_{n-1}a_{n-2}^3a_{n-4}^3}{a_n^7}-\frac{380a_{n-2}^3a_{n-3}^3a_{n-4}}{a_n^7}+\frac{665a_{n-1}^4a_{n-3}a_{n-4}^3}{a_n^8}+$$
$$\frac{665a_{n-1}^4a_{n-2}^3a_{n-9}}{a_n^8}+\frac{665a_{n-1}^4a_{n-3}^3a_{n-6}}{a_n^8}+\frac{665a_{n-1}^3a_{n-2}^4a_{n-8}}{a_n^8}+\frac{665a_{n-1}^3a_{n-3}^4a_{n-4}}{a_n^8}+$$

$$\frac{665a_{n-1}a_{n-2}^3a_{n-3}^4}{a_n^8} - \frac{1064a_{n-1}^5a_{n-2}a_{n-4}^3}{a_n^9} - \frac{1064a_{n-1}^5a_{n-2}^3a_{n-8}}{a_n^9} - \frac{1064a_{n-1}^5a_{n-3}^3a_{n-5}}{a_n^9} - \frac{1064a_{n-1}^3a_{n-2}^5a_{n-6}}{a_n^9} + \frac{1596a_{n-1}^6a_{n-2}^3a_{n-7}}{a_n^{10}} + \frac{1596a_{n-1}^6a_{n-3}^3a_{n-4}}{a_n^{10}} + \frac{1596a_{n-1}^3a_{n-2}^6a_{n-4}}{a_n^{10}} - \frac{2280a_{n-1}^7a_{n-2}^3a_{n-6}}{a_n^{11}} + \frac{3135a_{n-1}^8a_{n-2}^3a_{n-5}}{a_n^{12}} + \frac{3135a_{n-1}^8a_{n-2}a_{n-3}^3}{a_n^{12}} - \frac{4180a_{n-1}^9a_{n-2}^3a_{n-4}}{a_n^{13}} + \frac{5434a_{n-1}^{10}a_{n-2}^3a_{n-3}}{a_n^{14}} - \frac{1330a_{n-1}^4a_{n-2}^4a_{n-7}}{a_n^9} + \frac{2394a_{n-1}^5a_{n-2}a_{n-3}^4}{a_n^{10}} + \frac{2394a_{n-1}^5a_{n-2}^4a_{n-6}}{a_n^{10}} - \frac{3990a_{n-1}^6a_{n-2}^4a_{n-5}}{a_n^{11}} - \frac{3990a_{n-1}^4a_{n-2}^6a_{n-3}}{a_n^{11}} + \frac{6270a_{n-1}^7a_{n-2}^4a_{n-4}}{a_n^{12}} - \frac{9405a_{n-1}^8a_{n-2}^4a_{n-3}}{a_n^{13}} + \frac{2394a_{n-1}^4a_{n-2}^5a_{n-5}}{a_n^{10}} - \frac{4788a_{n-1}^5a_{n-2}^5a_{n-4}}{a_n^{11}} + \frac{8778a_{n-1}^6a_{n-2}^5a_{n-3}}{a_n^{12}} - \frac{570a_{n-1}^3a_{n-2}^2a_{n-6}^2}{a_n^7} - \frac{570a_{n-1}^3a_{n-3}^2a_{n-5}^2}{a_n^7} - \frac{570a_{n-1}^2a_{n-3}^3a_{n-4}^2}{a_n^7} - \frac{1596a_{n-1}^5a_{n-2}^2a_{n-5}^2}{a_n^9} - \frac{1596a_{n-1}^5a_{n-3}^2a_{n-4}^2}{a_n^9} - \frac{3420a_{n-1}^7a_{n-2}^2a_{n-4}^2}{a_n^{11}} - \frac{6270a_{n-1}^9a_{n-2}^2a_{n-3}^2}{a_n^{13}} + \frac{1330a_{n-1}^3a_{n-2}^2a_{n-4}^3}{a_n^8} + \frac{1330a_{n-1}^3a_{n-2}^3a_{n-5}^2}{a_n^8} - \frac{2660a_{n-1}^3a_{n-2}^4a_{n-4}^2}{a_n^9} - \frac{2660a_{n-1}^3a_{n-2}^2a_{n-3}^4}{a_n^9} - \frac{2660a_{n-1}^2a_{n-2}^4a_{n-3}^3}{a_n^9} + \frac{4788a_{n-1}^5a_{n-2}^3a_{n-4}^2}{a_n^{10}} + \frac{4788a_{n-1}^3a_{n-2}^5a_{n-3}^2}{a_n^{10}} - \frac{7980a_{n-1}^6a_{n-2}^2a_{n-3}^3}{a_n^{11}} + \frac{12540a_{n-1}^7a_{n-2}^3a_{n-3}^2}{a_n^{12}} - \frac{11970a_{n-1}^5a_{n-2}^4a_{n-3}^2}{a_n^{11}} + \frac{7980a_{n-1}^4a_{n-2}^3a_{n-3}^3}{a_n^{10}} + \frac{114a_{n-1}a_{n-2}a_{n-3}a_{n-13}}{a_n^4} + \frac{114a_{n-1}a_{n-2}a_{n-4}a_{n-12}}{a_n^4} + \frac{114a_{n-1}a_{n-2}a_{n-5}a_{n-11}}{a_n^4} + \frac{114a_{n-1}a_{n-2}a_{n-6}a_{n-10}}{a_n^4} + \frac{114a_{n-1}a_{n-2}a_{n-7}a_{n-9}}{a_n^4} + \frac{114a_{n-1}a_{n-3}a_{n-4}a_{n-11}}{a_n^4} + \frac{114a_{n-1}a_{n-3}a_{n-5}a_{n-10}}{a_n^4} + \frac{114a_{n-1}a_{n-3}a_{n-6}a_{n-9}}{a_n^4} + \frac{114a_{n-1}a_{n-3}a_{n-7}a_{n-8}}{a_n^4} + \frac{114a_{n-1}a_{n-4}a_{n-5}a_{n-9}}{a_n^4} + \frac{114a_{n-1}a_{n-4}a_{n-6}a_{n-8}}{a_n^4} + \frac{114a_{n-1}a_{n-5}a_{n-6}a_{n-7}}{a_n^4} + \frac{114a_{n-2}a_{n-3}a_{n-4}a_{n-10}}{a_n^4} + \frac{114a_{n-2}a_{n-3}a_{n-5}a_{n-9}}{a_n^4} + \frac{114a_{n-2}a_{n-3}a_{n-6}a_{n-8}}{a_n^4} + \frac{114a_{n-2}a_{n-4}a_{n-5}a_{n-8}}{a_n^4} + \frac{114a_{n-2}a_{n-4}a_{n-6}a_{n-7}}{a_n^4} + \frac{114a_{n-3}a_{n-4}a_{n-5}a_{n-7}}{a_n^4} - \frac{228a_{n-1}^2a_{n-2}a_{n-3}a_{n-12}}{a_n^5} - \frac{228a_{n-1}^2a_{n-2}a_{n-4}a_{n-11}}{a_n^5} - \frac{228a_{n-1}^2a_{n-2}a_{n-5}a_{n-10}}{a_n^5} - \frac{228a_{n-1}^2a_{n-2}a_{n-6}a_{n-9}}{a_n^5} - \frac{228a_{n-1}^2a_{n-2}a_{n-7}a_{n-8}}{a_n^5} - \frac{228a_{n-1}^2a_{n-3}a_{n-4}a_{n-10}}{a_n^5} - \frac{228a_{n-1}^2a_{n-3}a_{n-5}a_{n-9}}{a_n^5} - \frac{228a_{n-1}^2a_{n-3}a_{n-6}a_{n-8}}{a_n^5} - \frac{228a_{n-1}^2a_{n-4}a_{n-5}a_{n-8}}{a_n^5} - \frac{228a_{n-1}^2a_{n-4}a_{n-6}a_{n-7}}{a_n^5} - \frac{228a_{n-1}a_{n-2}^2a_{n-3}a_{n-11}}{a_n^5} - \frac{228a_{n-1}a_{n-2}^2a_{n-4}a_{n-10}}{a_n^5} - \frac{228a_{n-1}a_{n-2}^2a_{n-5}a_{n-9}}{a_n^5} - \frac{228a_{n-1}a_{n-2}^2a_{n-6}a_{n-8}}{a_n^5} - \frac{228a_{n-1}a_{n-2}a_{n-3}^2a_{n-10}}{a_n^5} - \frac{228a_{n-1}a_{n-3}^2a_{n-4}a_{n-8}}{a_n^5} - \frac{228a_{n-1}a_{n-3}^2a_{n-5}a_{n-7}}{a_n^5} - \frac{228a_{n-1}a_{n-2}a_{n-4}^2a_{n-8}}{a_n^5} - \frac{228a_{n-1}a_{n-3}a_{n-4}^2a_{n-7}}{a_n^5} - \frac{228a_{n-1}a_{n-2}a_{n-5}^2a_{n-6}}{a_n^5} - \frac{228a_{n-1}a_{n-2}a_{n-4}a_{n-6}^2}{a_n^5} - \frac{228a_{n-2}^2a_{n-3}a_{n-4}a_{n-8}}{a_n^5} -$$

$$\frac{228a_{n-2}^2a_{n-3}a_{n-5}a_{n-7}}{a_n^5} - \frac{228a_{n-2}^2a_{n-4}a_{n-5}a_{n-6}}{a_n^5} - \frac{228a_{n-2}a_{n-3}^2a_{n-4}a_{n-7}}{a_n^5} -$$
$$\frac{228a_{n-2}a_{n-3}^2a_{n-5}a_{n-6}}{a_n^5} - \frac{228a_{n-2}a_{n-3}a_{n-4}^2a_{n-6}}{a_n^5} - \frac{228a_{n-2}a_{n-3}a_{n-4}a_{n-5}^2}{a_n^5} +$$
$$\frac{380a_{n-1}^3a_{n-2}a_{n-3}a_{n-11}}{a_n^6} + \frac{380a_{n-1}^3a_{n-2}a_{n-4}a_{n-10}}{a_n^6} + \frac{380a_{n-1}^3a_{n-2}a_{n-5}a_{n-9}}{a_n^6} +$$
$$\frac{380a_{n-1}^3a_{n-2}a_{n-6}a_{n-8}}{a_n^6} + \frac{380a_{n-1}^3a_{n-3}a_{n-4}a_{n-9}}{a_n^6} + \frac{380a_{n-1}^3a_{n-3}a_{n-5}a_{n-8}}{a_n^6} +$$
$$\frac{380a_{n-1}^3a_{n-3}a_{n-6}a_{n-7}}{a_n^6} + \frac{380a_{n-1}^3a_{n-4}a_{n-5}a_{n-7}}{a_n^6} + \frac{380a_{n-1}a_{n-2}^3a_{n-3}a_{n-9}}{a_n^6} +$$
$$\frac{380a_{n-1}a_{n-2}^3a_{n-4}a_{n-8}}{a_n^6} + \frac{380a_{n-1}a_{n-2}^3a_{n-5}a_{n-7}}{a_n^6} + \frac{380a_{n-1}a_{n-2}a_{n-3}^3a_{n-7}}{a_n^6} +$$
$$\frac{380a_{n-1}a_{n-3}^3a_{n-4}a_{n-5}}{a_n^6} + \frac{380a_{n-2}^3a_{n-3}a_{n-4}a_{n-6}}{a_n^6} - \frac{570a_{n-1}^4a_{n-2}a_{n-3}a_{n-10}}{a_n^7} -$$
$$\frac{570a_{n-1}^4a_{n-2}a_{n-4}a_{n-9}}{a_n^7} - \frac{570a_{n-1}^4a_{n-2}a_{n-5}a_{n-8}}{a_n^7} - \frac{570a_{n-1}^4a_{n-2}a_{n-6}a_{n-7}}{a_n^7} -$$
$$\frac{570a_{n-1}^4a_{n-3}a_{n-4}a_{n-8}}{a_n^7} - \frac{570a_{n-1}^4a_{n-3}a_{n-5}a_{n-7}}{a_n^7} - \frac{570a_{n-1}^4a_{n-4}a_{n-5}a_{n-6}}{a_n^7} -$$
$$\frac{570a_{n-1}a_{n-2}^4a_{n-3}a_{n-7}}{a_n^7} - \frac{570a_{n-1}a_{n-2}^4a_{n-4}a_{n-6}}{a_n^7} - \frac{570a_{n-1}a_{n-2}a_{n-3}^4a_{n-4}}{a_n^7} +$$
$$\frac{798a_{n-1}^5a_{n-2}a_{n-3}a_{n-9}}{a_n^8} + \frac{798a_{n-1}^5a_{n-2}a_{n-4}a_{n-8}}{a_n^8} + \frac{798a_{n-1}^5a_{n-2}a_{n-5}a_{n-7}}{a_n^8} +$$
$$\frac{798a_{n-1}^5a_{n-3}a_{n-4}a_{n-7}}{a_n^8} + \frac{798a_{n-1}^5a_{n-3}a_{n-5}a_{n-6}}{a_n^8} + \frac{798a_{n-1}a_{n-2}^5a_{n-3}a_{n-5}}{a_n^8} -$$
$$\frac{1064a_{n-1}^6a_{n-2}a_{n-3}a_{n-8}}{a_n^9} - \frac{1064a_{n-1}^6a_{n-2}a_{n-4}a_{n-7}}{a_n^9} - \frac{1064a_{n-1}^6a_{n-2}a_{n-5}a_{n-6}}{a_n^9} -$$
$$\frac{1064a_{n-1}^6a_{n-3}a_{n-4}a_{n-6}}{a_n^9} + \frac{1368a_{n-1}^7a_{n-2}a_{n-3}a_{n-7}}{a_n^{10}} + \frac{1368a_{n-1}^7a_{n-2}a_{n-4}a_{n-6}}{a_n^{10}} +$$
$$\frac{1368a_{n-1}^7a_{n-3}a_{n-4}a_{n-5}}{a_n^{10}} - \frac{1710a_{n-1}^8a_{n-2}a_{n-3}a_{n-6}}{a_n^{11}} - \frac{1710a_{n-1}^8a_{n-2}a_{n-4}a_{n-5}}{a_n^{11}} +$$
$$\frac{2090a_{n-1}^9a_{n-2}a_{n-3}a_{n-5}}{a_n^{12}} - \frac{2508a_{n-1}^{10}a_{n-2}a_{n-3}a_{n-4}}{a_n^{13}} + \frac{570a_{n-1}^2a_{n-2}^2a_{n-3}a_{n-10}}{a_n^6} +$$
$$\frac{570a_{n-1}^2a_{n-2}^2a_{n-4}a_{n-9}}{a_n^6} + \frac{570a_{n-1}^2a_{n-2}^2a_{n-5}a_{n-8}}{a_n^6} + \frac{570a_{n-1}^2a_{n-2}^2a_{n-6}a_{n-7}}{a_n^6} +$$
$$\frac{570a_{n-1}^2a_{n-2}a_{n-3}^2a_{n-9}}{a_n^6} + \frac{570a_{n-1}^2a_{n-3}^2a_{n-4}a_{n-7}}{a_n^6} + \frac{570a_{n-1}^2a_{n-3}^2a_{n-5}a_{n-6}}{a_n^6} +$$
$$\frac{570a_{n-1}^2a_{n-2}a_{n-4}^2a_{n-7}}{a_n^6} + \frac{570a_{n-1}^2a_{n-3}a_{n-4}^2a_{n-6}}{a_n^6} + \frac{570a_{n-1}^2a_{n-3}a_{n-4}a_{n-5}^2}{a_n^6} +$$
$$\frac{570a_{n-1}^2a_{n-2}a_{n-3}a_{n-6}^2}{a_n^6} + \frac{570a_{n-1}a_{n-2}^2a_{n-3}^2a_{n-8}}{a_n^6} + \frac{570a_{n-1}a_{n-2}^2a_{n-4}^2a_{n-6}}{a_n^6} +$$
$$\frac{570a_{n-1}a_{n-2}^2a_{n-4}a_{n-5}^2}{a_n^6} + \frac{570a_{n-1}a_{n-2}a_{n-3}^2a_{n-5}^2}{a_n^6} + \frac{570a_{n-2}^2a_{n-3}^2a_{n-4}a_{n-5}}{a_n^6} -$$
$$\frac{1140a_{n-1}^3a_{n-2}^2a_{n-3}a_{n-9}}{a_n^7} - \frac{1140a_{n-1}^3a_{n-2}^2a_{n-4}a_{n-8}}{a_n^7} - \frac{1140a_{n-1}^3a_{n-2}^2a_{n-5}a_{n-7}}{a_n^7} -$$
$$\frac{1140a_{n-1}^3a_{n-2}a_{n-3}^2a_{n-8}}{a_n^7} - \frac{1140a_{n-1}^3a_{n-3}^2a_{n-4}a_{n-6}}{a_n^7} - \frac{1140a_{n-1}^3a_{n-2}a_{n-4}^2a_{n-6}}{a_n^7} -$$
$$\frac{1140a_{n-1}^3a_{n-3}a_{n-4}^2a_{n-5}}{a_n^7} - \frac{1140a_{n-1}^3a_{n-2}a_{n-4}a_{n-5}^2}{a_n^7} - \frac{1140a_{n-1}^2a_{n-2}^3a_{n-3}a_{n-8}}{a_n^7} -$$

$$\frac{1140a_{n-1}^2a_{n-2}^3a_{n-4}a_{n-7}}{a_n^7} - \frac{1140a_{n-1}^2a_{n-2}^3a_{n-5}a_{n-6}}{a_n^7} - \frac{1140a_{n-1}^2a_{n-2}a_{n-3}^3a_{n-6}}{a_n^7} - \frac{1140a_{n-1}^2a_{n-2}a_{n-3}a_{n-4}^3}{a_n^7} - \frac{1140a_{n-1}a_{n-2}^3a_{n-3}^2a_{n-6}}{a_n^7} - \frac{1140a_{n-1}a_{n-2}^2a_{n-3}^3a_{n-5}}{a_n^7} + \frac{1995a_{n-1}^4a_{n-2}^2a_{n-3}a_{n-8}}{a_n^7} + \frac{1995a_{n-1}^4a_{n-2}^2a_{n-4}a_{n-7}}{a_n^8} + \frac{1995a_{n-1}^4a_{n-2}^2a_{n-5}a_{n-6}}{a_n^8} + \frac{1995a_{n-1}^4a_{n-2}a_{n-3}^2a_{n-7}}{a_n^8} + \frac{1995a_{n-1}^4a_{n-2}a_{n-3}^2a_{n-4}a_{n-5}}{a_n^8} + \frac{1995a_{n-1}^4a_{n-2}a_{n-4}^2a_{n-5}}{a_n^8} + \frac{1995a_{n-1}^4a_{n-2}a_{n-3}a_{n-5}^2}{a_n^8} + \frac{1995a_{n-1}^2a_{n-2}^4a_{n-3}a_{n-6}}{a_n^8} + \frac{1995a_{n-1}^2a_{n-2}^4a_{n-4}a_{n-5}}{a_n^8} + \frac{1995a_{n-1}a_{n-2}^4a_{n-3}^2a_{n-4}}{a_n^8} - \frac{3192a_{n-1}^5a_{n-2}^2a_{n-3}a_{n-7}}{a_n^9} - \frac{3192a_{n-1}^5a_{n-2}^2a_{n-4}a_{n-6}}{a_n^9} - \frac{3192a_{n-1}^5a_{n-2}a_{n-3}^2a_{n-6}}{a_n^9} - \frac{3192a_{n-1}^2a_{n-2}^5a_{n-3}a_{n-4}}{a_n^9} + \frac{4788a_{n-1}^6a_{n-2}^2a_{n-3}a_{n-6}}{a_n^{10}} + \frac{4788a_{n-1}^6a_{n-2}^2a_{n-4}a_{n-5}}{a_n^{10}} + \frac{4788a_{n-1}^6a_{n-2}a_{n-3}^2a_{n-5}}{a_n^{10}} + \frac{4788a_{n-1}^6a_{n-2}a_{n-3}a_{n-4}^2}{a_n^{10}} - \frac{6840a_{n-1}^7a_{n-2}^2a_{n-3}a_{n-5}}{a_n^{11}} - \frac{6840a_{n-1}^7a_{n-2}a_{n-3}^2a_{n-4}}{a_n^{11}} + \frac{9405a_{n-1}^8a_{n-2}^2a_{n-3}a_{n-4}}{a_n^{12}} + \frac{2660a_{n-1}^3a_{n-2}^3a_{n-3}a_{n-7}}{a_n^8} + \frac{2660a_{n-1}^3a_{n-2}^3a_{n-4}a_{n-6}}{a_n^8} + \frac{2660a_{n-1}^3a_{n-2}a_{n-3}^3a_{n-5}}{a_n^8} - \frac{5320a_{n-1}^4a_{n-2}^3a_{n-3}a_{n-6}}{a_n^9} - \frac{5320a_{n-1}^4a_{n-2}^3a_{n-4}a_{n-5}}{a_n^9} - \frac{5320a_{n-1}^4a_{n-2}a_{n-3}^3a_{n-4}}{a_n^9} - \frac{5320a_{n-1}^3a_{n-2}^4a_{n-3}a_{n-5}}{a_n^9} + \frac{9576a_{n-1}^5a_{n-2}^3a_{n-3}a_{n-5}}{a_n^{10}} - \frac{15960a_{n-1}^6a_{n-2}^3a_{n-3}a_{n-4}}{a_n^{11}} + \frac{11970a_{n-1}^4a_{n-2}^4a_{n-3}a_{n-4}}{a_n^{10}} - \frac{1710a_{n-1}^2a_{n-2}^2a_{n-3}^2a_{n-7}}{a_n^7} - \frac{1710a_{n-1}^2a_{n-2}^2a_{n-4}^2a_{n-5}}{a_n^7} - \frac{1710a_{n-1}^2a_{n-2}^2a_{n-3}a_{n-5}^2}{a_n^7} - \frac{1710a_{n-1}a_{n-2}^2a_{n-3}^2a_{n-4}^2}{a_n^7} + \frac{3990a_{n-1}^3a_{n-2}^2a_{n-3}^2a_{n-6}}{a_n^8} + \frac{3990a_{n-1}^3a_{n-2}a_{n-3}^2a_{n-4}^2}{a_n^8} + \frac{3990a_{n-1}^2a_{n-2}^3a_{n-3}a_{n-5}^2}{a_n^8} + \frac{3990a_{n-1}^2a_{n-2}^3a_{n-3}a_{n-4}^2}{a_n^8} + \frac{3990a_{n-1}^2a_{n-2}^2a_{n-3}^3a_{n-4}}{a_n^8} - \frac{7980a_{n-1}^4a_{n-2}^2a_{n-3}^2a_{n-5}}{a_n^9} - \frac{7980a_{n-1}^4a_{n-2}^2a_{n-3}a_{n-4}^2}{a_n^9} - \frac{10640a_{n-1}^3a_{n-2}^3a_{n-3}^2a_{n-4}}{a_n^9} + \frac{14364a_{n-1}^5a_{n-2}^2a_{n-3}^2a_{n-4}}{a_n^{10}} - \frac{456a_{n-1}a_{n-2}a_{n-3}a_{n-4}a_{n-9}}{a_n^5} - \frac{456a_{n-1}a_{n-2}a_{n-3}a_{n-5}a_{n-8}}{a_n^5} - \frac{456a_{n-1}a_{n-2}a_{n-3}a_{n-6}a_{n-7}}{a_n^5} - \frac{456a_{n-1}a_{n-2}a_{n-4}a_{n-5}a_{n-7}}{a_n^5} - \frac{456a_{n-1}a_{n-3}a_{n-4}a_{n-5}a_{n-6}}{a_n^5} + \frac{1140a_{n-1}^2a_{n-2}a_{n-3}a_{n-4}a_{n-8}}{a_n^6} + \frac{1140a_{n-1}^2a_{n-2}a_{n-3}a_{n-5}a_{n-7}}{a_n^6} + \frac{1140a_{n-1}^2a_{n-2}a_{n-4}a_{n-5}a_{n-6}}{a_n^6} + \frac{1140a_{n-1}a_{n-2}^2a_{n-3}a_{n-4}a_{n-7}}{a_n^6} + \frac{1140a_{n-1}a_{n-2}^2a_{n-3}a_{n-5}a_{n-6}}{a_n^6} + \frac{1140a_{n-1}a_{n-2}a_{n-3}^2a_{n-4}a_{n-6}}{a_n^6} + \frac{1140a_{n-1}a_{n-2}a_{n-3}a_{n-4}^2a_{n-5}}{a_n^6} - \frac{2280a_{n-1}^3a_{n-2}a_{n-3}a_{n-4}a_{n-7}}{a_n^7} - \frac{2280a_{n-1}^3a_{n-2}a_{n-3}a_{n-5}a_{n-6}}{a_n^7} - \frac{2280a_{n-1}a_{n-2}^3a_{n-3}a_{n-4}a_{n-5}}{a_n^7} +$$

$$\frac{3990a_{n-1}^4a_{n-2}a_{n-3}a_{n-4}a_{n-6}}{a_n^8} - \frac{6384a_{n-1}^5a_{n-2}a_{n-3}a_{n-4}a_{n-5}}{a_n^9} - \frac{3420a_{n-1}^2a_{n-2}^2a_{n-3}a_{n-4}a_{n-6}}{a_n^7} - \frac{3420a_{n-1}^2a_{n-2}a_{n-3}^2a_{n-4}a_{n-5}}{a_n^7} + \frac{7980a_{n-1}^3a_{n-2}^2a_{n-3}a_{n-4}a_{n-5}}{a_n^8}$$

$$\sum_{k=1}^{n} Z_k^{20} = -\frac{20a_{n-20}}{a_n} + \frac{10a_{n-10}^2}{a_n^2} + \frac{5a_{n-5}^4}{a_n^4} - \frac{4a_{n-4}^5}{a_n^5} + \frac{2a_{n-2}^{10}}{a_n^{10}} + \frac{a_{n-1}^{20}}{a_n^{20}} + \frac{20a_{n-1}a_{n-19}}{a_n^2} + \frac{20a_{n-2}a_{n-18}}{a_n^2} + \frac{20a_{n-3}a_{n-17}}{a_n^2} + \frac{20a_{n-4}a_{n-16}}{a_n^2} + \frac{20a_{n-5}a_{n-15}}{a_n^2} + \frac{20a_{n-6}a_{n-14}}{a_n^2} + \frac{20a_{n-7}a_{n-13}}{a_n^2} + \frac{20a_{n-8}a_{n-12}}{a_n^2} + \frac{20a_{n-9}a_{n-11}}{a_n^2} - \frac{20a_{n-1}^2a_{n-18}}{a_n^3} - \frac{20a_{n-4}a_{n-8}^2}{a_n^3} - \frac{20a_{n-2}^2a_{n-16}}{a_n^3} - \frac{20a_{n-3}^2a_{n-14}}{a_n^3} - \frac{20a_{n-4}^2a_{n-12}}{a_n^3} - \frac{20a_{n-5}^2a_{n-10}}{a_n^3} - \frac{20a_{n-6}^2a_{n-8}}{a_n^3} - \frac{20a_{n-6}a_{n-7}^2}{a_n^3} - \frac{20a_{n-2}a_{n-9}^2}{a_n^3} + \frac{20a_{n-1}^3a_{n-17}}{a_n^4} + \frac{20a_{n-2}^3a_{n-14}}{a_n^4} + \frac{20a_{n-3}^3a_{n-11}}{a_n^4} + \frac{20a_{n-4}^3a_{n-8}}{a_n^4} + \frac{20a_{n-2}a_{n-6}^3}{a_n^4} - \frac{20a_{n-1}^4a_{n-16}}{a_n^5} - \frac{20a_{n-2}^4a_{n-12}}{a_n^5} - \frac{20a_{n-3}^4a_{n-8}}{a_n^5} + \frac{20a_{n-1}^5a_{n-15}}{a_n^6} + \frac{20a_{n-2}^5a_{n-10}}{a_n^6} + \frac{20a_{n-3}^5a_{n-5}}{a_n^6} - \frac{20a_{n-1}^6a_{n-14}}{a_n^7} - \frac{20a_{n-2}^6a_{n-8}}{a_n^7} - \frac{20a_{n-2}a_{n-3}^6}{a_n^7} + \frac{20a_{n-1}^7a_{n-13}}{a_n^8} + \frac{20a_{n-2}^7a_{n-6}}{a_n^8} - \frac{20a_{n-1}^8a_{n-12}}{a_n^9} - \frac{20a_{n-2}^8a_{n-4}}{a_n^9} + \frac{20a_{n-1}^9a_{n-11}}{a_n^{10}} - \frac{20a_{n-1}^{10}a_{n-10}}{a_n^{11}} + \frac{20a_{n-1}^{11}a_{n-9}}{a_n^{12}} - \frac{20a_{n-1}^{12}a_{n-8}}{a_n^{13}} + \frac{20a_{n-1}^{13}a_{n-7}}{a_n^{14}} - \frac{20a_{n-1}^{14}a_{n-6}}{a_n^{15}} + \frac{20a_{n-1}^{15}a_{n-5}}{a_n^{16}} - \frac{20a_{n-1}^{16}a_{n-4}}{a_n^{17}} + \frac{20a_{n-1}^{17}a_{n-3}}{a_n^{18}} - \frac{20a_{n-1}^{18}a_{n-2}}{a_n^{19}} + \frac{30a_{n-1}^2a_{n-9}^2}{a_n^4} + \frac{30a_{n-2}^2a_{n-8}^2}{a_n^4} + \frac{30a_{n-3}^2a_{n-7}^2}{a_n^4} + \frac{30a_{n-4}^2a_{n-6}^2}{a_n^4} - \frac{40a_{n-1}^2a_{n-6}^3}{a_n^5} - \frac{40a_{n-2}^3a_{n-7}^2}{a_n^5} + \frac{50a_{n-1}^4a_{n-8}^2}{a_n^6} + \frac{50a_{n-2}^4a_{n-6}^2}{a_n^6} + \frac{50a_{n-3}^4a_{n-4}^2}{a_n^6} + \frac{50a_{n-2}^2a_{n-4}^4}{a_n^6} - \frac{60a_{n-2}^5a_{n-5}^2}{a_n^7} + \frac{70a_{n-1}^6a_{n-7}^2}{a_n^8} + \frac{70a_{n-1}^2a_{n-3}^6}{a_n^8} + \frac{70a_{n-2}^6a_{n-4}^2}{a_n^8} - \frac{80a_{n-2}^7a_{n-3}^2}{a_n^9} + \frac{90a_{n-1}^8a_{n-6}^2}{a_n^{10}} - \frac{100a_{n-1}^2a_{n-2}^9}{a_n^{11}} + \frac{110a_{n-1}^{10}a_{n-5}^2}{a_n^{12}} + \frac{130a_{n-1}^{12}a_{n-4}^2}{a_n^{14}} + \frac{150a_{n-1}^{14}a_{n-3}^2}{a_n^{16}} + \frac{170a_{n-1}^{16}a_{n-2}^2}{a_n^{18}} - \frac{100a_{n-2}^4a_{n-4}^3}{a_n^7} + \frac{140a_{n-1}^5a_{n-5}^3}{a_n^8} - \frac{300a_{n-1}^8a_{n-4}^3}{a_n^{11}} + \frac{520a_{n-1}^{11}a_{n-3}^3}{a_n^{14}} - \frac{800a_{n-1}^{14}a_{n-2}^3}{a_n^{17}} + \frac{175a_{n-1}^4a_{n-4}^4}{a_n^8} + \frac{175a_{n-2}^4a_{n-3}^4}{a_n^8} + \frac{825a_{n-1}^8a_{n-3}^4}{a_n^{12}} + \frac{825a_{n-1}^4a_{n-2}^8}{a_n^{12}} + \frac{2275a_{n-1}^{12}a_{n-2}^4}{a_n^{16}} + \frac{504a_{n-1}^5a_{n-3}^5}{a_n^{10}} - \frac{4004a_{n-1}^{10}a_{n-2}^5}{a_n^{15}} - \frac{2640a_{n-1}^6a_{n-2}^7}{a_n^{13}} + \frac{4290a_{n-1}^8a_{n-2}^6}{a_n^{14}} - \frac{40a_{n-1}a_{n-2}a_{n-17}}{a_n^3} - \frac{40a_{n-1}a_{n-3}a_{n-16}}{a_n^3} - \frac{40a_{n-1}a_{n-4}a_{n-15}}{a_n^3} - \frac{40a_{n-1}a_{n-5}a_{n-14}}{a_n^3} - \frac{40a_{n-1}a_{n-6}a_{n-13}}{a_n^3} - \frac{40a_{n-1}a_{n-7}a_{n-12}}{a_n^3} - \frac{40a_{n-1}a_{n-8}a_{n-11}}{a_n^3} - \frac{40a_{n-1}a_{n-9}a_{n-10}}{a_n^3} - \frac{40a_{n-2}a_{n-3}a_{n-15}}{a_n^3} - \frac{40a_{n-2}a_{n-4}a_{n-14}}{a_n^3} - \frac{40a_{n-2}a_{n-5}a_{n-13}}{a_n^3} - \frac{40a_{n-2}a_{n-6}a_{n-12}}{a_n^3} - \frac{40a_{n-2}a_{n-7}a_{n-11}}{a_n^3} - \frac{40a_{n-2}a_{n-8}a_{n-10}}{a_n^3} - \frac{40a_{n-3}a_{n-4}a_{n-13}}{a_n^3} -$$

$$\frac{40a_{n-3}a_{n-5}a_{n-12}}{a_n^3} - \frac{40a_{n-3}a_{n-6}a_{n-11}}{a_n^3} - \frac{40a_{n-3}a_{n-7}a_{n-10}}{a_n^3} - \frac{40a_{n-3}a_{n-8}a_{n-9}}{a_n^3} -$$
$$\frac{40a_{n-4}a_{n-5}a_{n-11}}{a_n^3} - \frac{40a_{n-4}a_{n-6}a_{n-10}}{a_n^3} - \frac{40a_{n-4}a_{n-7}a_{n-9}}{a_n^3} - \frac{40a_{n-5}a_{n-6}a_{n-9}}{a_n^3} -$$
$$\frac{40a_{n-5}a_{n-7}a_{n-8}}{a_n^3} + \frac{60a_{n-1}^2a_{n-2}a_{n-16}}{a_n^4} + \frac{60a_{n-1}^2a_{n-3}a_{n-15}}{a_n^4} + \frac{60a_{n-1}^2a_{n-4}a_{n-14}}{a_n^4} +$$
$$\frac{60a_{n-1}^2a_{n-5}a_{n-13}}{a_n^4} + \frac{60a_{n-1}^2a_{n-6}a_{n-12}}{a_n^4} + \frac{60a_{n-1}^2a_{n-7}a_{n-11}}{a_n^4} + \frac{60a_{n-1}^2a_{n-8}a_{n-10}}{a_n^4} +$$
$$\frac{60a_{n-1}a_{n-3}a_{n-8}^2}{a_n^4} + \frac{60a_{n-1}a_{n-2}^2a_{n-15}}{a_n^4} + \frac{60a_{n-1}a_{n-3}^2a_{n-13}}{a_n^4} + \frac{60a_{n-1}a_{n-4}^2a_{n-11}}{a_n^4} +$$
$$\frac{60a_{n-1}a_{n-5}^2a_{n-9}}{a_n^4} + \frac{60a_{n-1}a_{n-6}^2a_{n-7}}{a_n^4} + \frac{60a_{n-1}a_{n-5}a_{n-7}^2}{a_n^4} + \frac{60a_{n-2}^2a_{n-3}a_{n-13}}{a_n^4} +$$
$$\frac{60a_{n-2}^2a_{n-4}a_{n-12}}{a_n^4} + \frac{60a_{n-2}^2a_{n-5}a_{n-11}}{a_n^4} + \frac{60a_{n-2}^2a_{n-6}a_{n-10}}{a_n^4} + \frac{60a_{n-2}^2a_{n-7}a_{n-9}}{a_n^4} +$$
$$\frac{60a_{n-2}a_{n-3}^2a_{n-12}}{a_n^4} + \frac{60a_{n-3}^2a_{n-4}a_{n-10}}{a_n^4} + \frac{60a_{n-3}^2a_{n-5}a_{n-9}}{a_n^4} + \frac{60a_{n-3}^2a_{n-6}a_{n-8}}{a_n^4} +$$
$$\frac{60a_{n-2}a_{n-4}^2a_{n-10}}{a_n^4} + \frac{60a_{n-3}a_{n-4}^2a_{n-9}}{a_n^4} + \frac{60a_{n-4}^2a_{n-5}a_{n-7}}{a_n^4} + \frac{60a_{n-2}a_{n-5}^2a_{n-8}}{a_n^4} +$$
$$\frac{60a_{n-3}a_{n-5}^2a_{n-7}}{a_n^4} + \frac{60a_{n-4}a_{n-5}^2a_{n-6}}{a_n^4} + \frac{60a_{n-3}a_{n-5}a_{n-6}^2}{a_n^4} + \frac{60a_{n-2}a_{n-4}a_{n-7}^2}{a_n^4} -$$
$$\frac{80a_{n-1}^3a_{n-2}a_{n-15}}{a_n^5} - \frac{80a_{n-1}^3a_{n-3}a_{n-14}}{a_n^5} - \frac{80a_{n-1}^3a_{n-4}a_{n-13}}{a_n^5} - \frac{80a_{n-1}^3a_{n-5}a_{n-12}}{a_n^5} -$$
$$\frac{80a_{n-1}^3a_{n-6}a_{n-11}}{a_n^5} - \frac{80a_{n-1}^3a_{n-7}a_{n-10}}{a_n^5} - \frac{80a_{n-1}^3a_{n-8}a_{n-9}}{a_n^5} - \frac{80a_{n-1}a_{n-2}^3a_{n-13}}{a_n^5} -$$
$$\frac{80a_{n-1}a_{n-3}^3a_{n-10}}{a_n^5} - \frac{80a_{n-1}a_{n-4}^3a_{n-7}}{a_n^5} - \frac{80a_{n-1}a_{n-4}a_{n-5}^3}{a_n^5} - \frac{80a_{n-2}^3a_{n-3}a_{n-11}}{a_n^5} -$$
$$\frac{80a_{n-2}^3a_{n-4}a_{n-10}}{a_n^5} - \frac{80a_{n-2}^3a_{n-5}a_{n-9}}{a_n^5} - \frac{80a_{n-2}^3a_{n-6}a_{n-8}}{a_n^5} - \frac{80a_{n-2}a_{n-3}^3a_{n-9}}{a_n^5} -$$
$$\frac{80a_{n-3}^3a_{n-4}a_{n-7}}{a_n^5} - \frac{80a_{n-3}^3a_{n-5}a_{n-6}}{a_n^5} - \frac{80a_{n-2}a_{n-4}^3a_{n-6}}{a_n^5} - \frac{80a_{n-3}a_{n-4}^3a_{n-5}}{a_n^5} -$$
$$\frac{80a_{n-2}a_{n-3}a_{n-5}^3}{a_n^5} + \frac{100a_{n-1}^4a_{n-2}a_{n-14}}{a_n^6} + \frac{100a_{n-1}^4a_{n-3}a_{n-13}}{a_n^6} + \frac{100a_{n-1}^4a_{n-4}a_{n-12}}{a_n^6} +$$
$$\frac{100a_{n-1}^4a_{n-5}a_{n-11}}{a_n^6} + \frac{100a_{n-1}^4a_{n-6}a_{n-10}}{a_n^6} + \frac{100a_{n-1}^4a_{n-7}a_{n-9}}{a_n^6} + \frac{100a_{n-1}a_{n-3}^4a_{n-7}}{a_n^6} +$$
$$\frac{100a_{n-1}a_{n-3}a_{n-4}^4}{a_n^6} + \frac{100a_{n-1}a_{n-2}^4a_{n-11}}{a_n^6} + \frac{100a_{n-2}^4a_{n-3}a_{n-9}}{a_n^6} + \frac{100a_{n-2}^4a_{n-4}a_{n-8}}{a_n^6} +$$
$$\frac{100a_{n-2}^4a_{n-5}a_{n-7}}{a_n^6} + \frac{100a_{n-2}a_{n-3}^4a_{n-6}}{a_n^6} - \frac{120a_{n-1}^5a_{n-2}a_{n-13}}{a_n^7} - \frac{120a_{n-1}^5a_{n-3}a_{n-12}}{a_n^7} -$$
$$\frac{120a_{n-1}^5a_{n-4}a_{n-11}}{a_n^7} - \frac{120a_{n-1}^5a_{n-5}a_{n-10}}{a_n^7} - \frac{120a_{n-1}^5a_{n-6}a_{n-9}}{a_n^7} - \frac{120a_{n-1}^5a_{n-7}a_{n-8}}{a_n^7} -$$
$$\frac{120a_{n-1}a_{n-2}^5a_{n-9}}{a_n^7} - \frac{120a_{n-1}a_{n-3}^5a_{n-4}}{a_n^7} - \frac{120a_{n-2}^5a_{n-3}a_{n-7}}{a_n^7} - \frac{120a_{n-2}^5a_{n-4}a_{n-6}}{a_n^7} +$$
$$\frac{140a_{n-1}^6a_{n-2}a_{n-12}}{a_n^8} + \frac{140a_{n-1}^6a_{n-3}a_{n-11}}{a_n^8} + \frac{140a_{n-1}^6a_{n-4}a_{n-10}}{a_n^8} + \frac{140a_{n-1}^6a_{n-5}a_{n-9}}{a_n^8} +$$
$$\frac{140a_{n-1}^6a_{n-6}a_{n-8}}{a_n^8} + \frac{140a_{n-1}a_{n-2}^6a_{n-7}}{a_n^8} + \frac{140a_{n-2}^6a_{n-3}a_{n-5}}{a_n^8} - \frac{160a_{n-1}^7a_{n-2}a_{n-11}}{a_n^9} -$$
$$\frac{160a_{n-1}^7a_{n-3}a_{n-10}}{a_n^9} - \frac{160a_{n-1}^7a_{n-4}a_{n-9}}{a_n^9} - \frac{160a_{n-1}^7a_{n-5}a_{n-8}}{a_n^9} - \frac{160a_{n-1}^7a_{n-6}a_{n-7}}{a_n^9} -$$

$$\frac{160a_{n-1}a_{n-2}^{7}a_{n-5}}{a_n^9}+\frac{180a_{n-1}^{8}a_{n-2}a_{n-10}}{a_n^{10}}+\frac{180a_{n-1}^{8}a_{n-3}a_{n-9}}{a_n^{10}}+\frac{180a_{n-1}^{8}a_{n-4}a_{n-8}}{a_n^{10}}+$$
$$\frac{180a_{n-1}^{8}a_{n-5}a_{n-7}}{a_n^{10}}+\frac{180a_{n-1}a_{n-2}^{8}a_{n-3}}{a_n^{10}}-\frac{200a_{n-1}^{9}a_{n-2}a_{n-9}}{a_n^{11}}-\frac{200a_{n-1}^{9}a_{n-3}a_{n-8}}{a_n^{11}}-$$
$$\frac{200a_{n-1}^{9}a_{n-4}a_{n-7}}{a_n^{11}}-\frac{200a_{n-1}^{9}a_{n-5}a_{n-6}}{a_n^{11}}+\frac{220a_{n-1}^{10}a_{n-2}a_{n-8}}{a_n^{12}}+\frac{220a_{n-1}^{10}a_{n-3}a_{n-7}}{a_n^{12}}+$$
$$\frac{220a_{n-1}^{10}a_{n-4}a_{n-6}}{a_n^{12}}-\frac{240a_{n-1}^{11}a_{n-2}a_{n-7}}{a_n^{13}}-\frac{240a_{n-1}^{11}a_{n-3}a_{n-6}}{a_n^{13}}-\frac{240a_{n-1}^{11}a_{n-4}a_{n-5}}{a_n^{13}}+$$
$$\frac{260a_{n-1}^{12}a_{n-2}a_{n-6}}{a_n^{14}}+\frac{260a_{n-1}^{12}a_{n-3}a_{n-5}}{a_n^{14}}-\frac{280a_{n-1}^{13}a_{n-2}a_{n-5}}{a_n^{15}}-\frac{280a_{n-1}^{13}a_{n-3}a_{n-4}}{a_n^{15}}+$$
$$\frac{300a_{n-1}^{14}a_{n-2}a_{n-4}}{a_n^{16}}-\frac{320a_{n-1}^{15}a_{n-2}a_{n-3}}{a_n^{17}}-\frac{120a_{n-1}^{2}a_{n-2}a_{n-8}^{2}}{a_n^{5}}-\frac{120a_{n-1}^{2}a_{n-2}^{2}a_{n-14}}{a_n^{5}}-$$
$$\frac{120a_{n-1}^{2}a_{n-3}^{2}a_{n-12}}{a_n^{5}}-\frac{120a_{n-1}^{2}a_{n-4}^{2}a_{n-10}}{a_n^{5}}-\frac{120a_{n-1}^{2}a_{n-5}^{2}a_{n-8}}{a_n^{5}}-\frac{120a_{n-1}^{2}a_{n-4}a_{n-7}^{2}}{a_n^{5}}-$$
$$\frac{120a_{n-2}^{2}a_{n-3}^{2}a_{n-10}}{a_n^{5}}-\frac{120a_{n-2}^{2}a_{n-4}^{2}a_{n-8}}{a_n^{5}}-\frac{120a_{n-2}^{2}a_{n-5}^{2}a_{n-6}}{a_n^{5}}-\frac{120a_{n-2}^{2}a_{n-4}a_{n-6}^{2}}{a_n^{5}}-$$
$$\frac{120a_{n-3}^{2}a_{n-4}^{2}a_{n-6}}{a_n^{5}}-\frac{120a_{n-3}^{2}a_{n-4}a_{n-5}^{2}}{a_n^{5}}-\frac{120a_{n-2}a_{n-3}^{2}a_{n-6}^{2}}{a_n^{5}}-\frac{120a_{n-2}a_{n-4}^{2}a_{n-5}^{2}}{a_n^{5}}+$$
$$\frac{200a_{n-1}^{3}a_{n-5}a_{n-6}^{2}}{a_n^{6}}+\frac{200a_{n-1}^{3}a_{n-2}^{2}a_{n-13}}{a_n^{6}}+\frac{200a_{n-1}^{3}a_{n-3}^{2}a_{n-11}}{a_n^{6}}+\frac{200a_{n-1}^{3}a_{n-4}^{2}a_{n-9}}{a_n^{6}}+$$
$$\frac{200a_{n-1}^{3}a_{n-5}^{2}a_{n-7}}{a_n^{6}}+\frac{200a_{n-1}^{3}a_{n-3}a_{n-7}^{2}}{a_n^{6}}+\frac{200a_{n-1}^{2}a_{n-2}^{3}a_{n-12}}{a_n^{6}}+\frac{200a_{n-1}^{2}a_{n-3}^{3}a_{n-9}}{a_n^{6}}+$$
$$\frac{200a_{n-1}^{2}a_{n-4}^{3}a_{n-6}}{a_n^{6}}+\frac{200a_{n-1}^{2}a_{n-3}a_{n-5}^{3}}{a_n^{6}}+\frac{200a_{n-1}a_{n-3}^{3}a_{n-5}^{2}}{a_n^{6}}+\frac{200a_{n-1}a_{n-2}^{2}a_{n-5}^{3}}{a_n^{6}}+$$
$$\frac{200a_{n-2}^{3}a_{n-3}^{2}a_{n-8}}{a_n^{6}}+\frac{200a_{n-2}^{3}a_{n-4}^{2}a_{n-6}}{a_n^{6}}+\frac{200a_{n-2}^{3}a_{n-4}a_{n-5}^{2}}{a_n^{6}}+\frac{200a_{n-2}^{2}a_{n-3}^{3}a_{n-7}}{a_n^{6}}+$$
$$\frac{200a_{n-2}a_{n-3}^{2}a_{n-4}^{3}}{a_n^{6}}-\frac{300a_{n-1}^{4}a_{n-4}a_{n-6}^{2}}{a_n^{7}}-\frac{300a_{n-1}^{4}a_{n-2}^{2}a_{n-12}}{a_n^{7}}-\frac{300a_{n-1}^{4}a_{n-3}^{2}a_{n-10}}{a_n^{7}}-$$
$$\frac{300a_{n-1}^{4}a_{n-4}^{2}a_{n-8}}{a_n^{7}}-\frac{300a_{n-1}^{4}a_{n-5}^{2}a_{n-6}}{a_n^{7}}-\frac{300a_{n-1}^{4}a_{n-2}a_{n-7}^{2}}{a_n^{7}}-\frac{300a_{n-1}^{2}a_{n-2}a_{n-4}^{4}}{a_n^{7}}-$$
$$\frac{300a_{n-1}^{2}a_{n-2}^{4}a_{n-10}}{a_n^{7}}-\frac{300a_{n-1}^{2}a_{n-3}^{4}a_{n-6}}{a_n^{7}}-\frac{300a_{n-2}^{4}a_{n-3}^{2}a_{n-6}}{a_n^{7}}-\frac{300a_{n-2}^{2}a_{n-3}^{4}a_{n-4}}{a_n^{7}}+$$
$$\frac{420a_{n-1}^{5}a_{n-3}a_{n-6}^{2}}{a_n^{8}}+\frac{420a_{n-1}^{5}a_{n-2}^{2}a_{n-11}}{a_n^{8}}+\frac{420a_{n-1}^{5}a_{n-3}^{2}a_{n-9}}{a_n^{8}}+\frac{420a_{n-1}^{5}a_{n-4}^{2}a_{n-7}}{a_n^{8}}+$$
$$\frac{420a_{n-1}^{2}a_{n-2}^{5}a_{n-8}}{a_n^{8}}+\frac{420a_{n-1}a_{n-2}^{2}a_{n-3}^{5}}{a_n^{8}}+\frac{420a_{n-2}^{5}a_{n-3}^{2}a_{n-4}}{a_n^{8}}-\frac{560a_{n-1}^{6}a_{n-2}^{2}a_{n-10}}{a_n^{9}}-$$
$$\frac{560a_{n-1}^{6}a_{n-3}^{2}a_{n-8}}{a_n^{9}}-\frac{560a_{n-1}^{6}a_{n-4}^{2}a_{n-6}}{a_n^{9}}-\frac{560a_{n-1}^{6}a_{n-4}a_{n-5}^{2}}{a_n^{9}}-\frac{560a_{n-1}^{6}a_{n-2}a_{n-6}^{2}}{a_n^{9}}-$$
$$\frac{560a_{n-1}^{2}a_{n-2}^{6}a_{n-6}}{a_n^{9}}+\frac{720a_{n-1}^{7}a_{n-2}^{2}a_{n-9}}{a_n^{10}}+\frac{720a_{n-1}^{7}a_{n-3}^{2}a_{n-7}}{a_n^{10}}+\frac{720a_{n-1}^{7}a_{n-4}^{2}a_{n-5}}{a_n^{10}}+$$
$$\frac{720a_{n-1}^{7}a_{n-3}a_{n-5}^{2}}{a_n^{10}}+\frac{720a_{n-1}^{2}a_{n-2}^{7}a_{n-4}}{a_n^{10}}-\frac{900a_{n-1}^{8}a_{n-2}^{2}a_{n-8}}{a_n^{11}}-\frac{900a_{n-1}^{8}a_{n-3}^{2}a_{n-6}}{a_n^{11}}-$$
$$\frac{900a_{n-1}^{8}a_{n-2}a_{n-5}^{2}}{a_n^{11}}+\frac{1100a_{n-1}^{9}a_{n-2}^{2}a_{n-7}}{a_n^{12}}+\frac{1100a_{n-1}^{9}a_{n-3}^{2}a_{n-5}}{a_n^{12}}+\frac{1100a_{n-1}^{9}a_{n-3}a_{n-4}^{2}}{a_n^{12}}-$$
$$\frac{1320a_{n-1}^{10}a_{n-2}^{2}a_{n-6}}{a_n^{13}}-\frac{1320a_{n-1}^{10}a_{n-3}^{2}a_{n-4}}{a_n^{13}}-\frac{1320a_{n-1}^{10}a_{n-2}a_{n-4}^{2}}{a_n^{13}}+\frac{1560a_{n-1}^{11}a_{n-2}^{2}a_{n-5}}{a_n^{14}}-$$
$$\frac{1820a_{n-1}^{12}a_{n-2}^{2}a_{n-4}}{a_n^{15}}-\frac{1820a_{n-1}^{12}a_{n-2}a_{n-3}^{2}}{a_n^{15}}+\frac{2100a_{n-1}^{13}a_{n-2}^{2}a_{n-3}}{a_n^{16}}-\frac{400a_{n-1}^{3}a_{n-2}^{3}a_{n-11}}{a_n^{7}}-$$

$$\frac{400a_{n-1}^3a_{n-3}^3a_{n-8}}{a_n^7}-\frac{400a_{n-1}^3a_{n-4}^3a_{n-5}}{a_n^7}-\frac{400a_{n-1}^3a_{n-2}a_{n-5}^3}{a_n^7}-\frac{400a_{n-2}^3a_{n-3}^3a_{n-5}}{a_n^7}+$$
$$\frac{700a_{n-1}^4a_{n-2}^3a_{n-10}}{a_n^8}+\frac{700a_{n-1}^4a_{n-3}^3a_{n-7}}{a_n^8}+\frac{700a_{n-1}^3a_{n-2}^4a_{n-9}}{a_n^8}+\frac{700a_{n-1}^3a_{n-3}^4a_{n-5}}{a_n^8}-$$
$$\frac{1120a_{n-1}^5a_{n-3}a_{n-4}^3}{a_n^9}-\frac{1120a_{n-1}^5a_{n-2}^3a_{n-9}}{a_n^9}-\frac{1120a_{n-1}^5a_{n-3}^3a_{n-6}}{a_n^9}-\frac{1120a_{n-1}^3a_{n-2}a_{n-3}^5}{a_n^9}-$$
$$\frac{1120a_{n-1}^3a_{n-2}^5a_{n-7}}{a_n^9}-\frac{1120a_{n-1}a_{n-2}^5a_{n-3}^3}{a_n^9}+\frac{1680a_{n-1}^6a_{n-2}a_{n-4}^3}{a_n^{10}}+\frac{1680a_{n-1}^6a_{n-2}^3a_{n-8}}{a_n^{10}}+$$
$$\frac{1680a_{n-1}^6a_{n-3}^3a_{n-5}}{a_n^{10}}+\frac{1680a_{n-1}^3a_{n-2}^6a_{n-5}}{a_n^{10}}-\frac{2400a_{n-1}^7a_{n-2}^3a_{n-7}}{a_n^{11}}-\frac{2400a_{n-1}^7a_{n-3}^3a_{n-4}}{a_n^{11}}-$$
$$\frac{2400a_{n-1}^3a_{n-2}^7a_{n-3}}{a_n^{11}}+\frac{3300a_{n-1}^8a_{n-2}^3a_{n-6}}{a_n^{12}}-\frac{4400a_{n-1}^9a_{n-2}^3a_{n-5}}{a_n^{13}}-\frac{4400a_{n-1}^9a_{n-2}a_{n-3}^3}{a_n^{13}}+$$
$$\frac{5720a_{n-1}^{10}a_{n-2}^3a_{n-4}}{a_n^{14}}-\frac{7280a_{n-1}^{11}a_{n-2}^3a_{n-3}}{a_n^{15}}-\frac{1400a_{n-1}^4a_{n-2}^4a_{n-8}}{a_n^9}-\frac{1400a_{n-1}^4a_{n-3}^4a_{n-4}}{a_n^9}+$$
$$\frac{2520a_{n-1}^5a_{n-2}^4a_{n-7}}{a_n^{10}}+\frac{2520a_{n-1}^4a_{n-2}^5a_{n-6}}{a_n^{10}}-\frac{4200a_{n-1}^6a_{n-2}a_{n-3}^4}{a_n^{11}}-\frac{4200a_{n-1}^6a_{n-2}^4a_{n-6}}{a_n^{11}}-$$
$$\frac{4200a_{n-1}^4a_{n-2}^6a_{n-4}}{a_n^{11}}+\frac{6600a_{n-1}^7a_{n-2}^4a_{n-5}}{a_n^{12}}-\frac{9900a_{n-1}^8a_{n-2}^4a_{n-4}}{a_n^{13}}+\frac{14300a_{n-1}^9a_{n-2}^4a_{n-3}}{a_n^{14}}-$$
$$\frac{5040a_{n-1}^5a_{n-2}^5a_{n-5}}{a_n^{11}}+\frac{9240a_{n-1}^6a_{n-2}^5a_{n-4}}{a_n^{12}}+\frac{9240a_{n-1}^5a_{n-2}^6a_{n-3}}{a_n^{12}}-\frac{15840a_{n-1}^7a_{n-2}^5a_{n-3}}{a_n^{13}}+$$
$$\frac{300a_{n-1}^2a_{n-2}^2a_{n-7}^2}{a_n^6}+\frac{300a_{n-1}^2a_{n-3}^2a_{n-6}^2}{a_n^6}+\frac{300a_{n-1}^2a_{n-4}^2a_{n-5}^2}{a_n^6}+\frac{300a_{n-2}^2a_{n-3}^2a_{n-5}^2}{a_n^6}-$$
$$\frac{600a_{n-1}^2a_{n-2}^3a_{n-6}^2}{a_n^7}-\frac{600a_{n-1}^2a_{n-3}^2a_{n-4}^3}{a_n^7}+\frac{600a_{n-2}^3a_{n-3}^2a_{n-4}^2}{a_n^7}+\frac{1050a_{n-1}^2a_{n-2}^4a_{n-5}^2}{a_n^8}+$$
$$\frac{1050a_{n-1}^4a_{n-2}^2a_{n-6}^2}{a_n^8}+\frac{1050a_{n-1}^4a_{n-3}^2a_{n-5}^2}{a_n^8}-\frac{1680a_{n-1}^2a_{n-2}^5a_{n-4}^2}{a_n^9}+\frac{2520a_{n-1}^6a_{n-2}^2a_{n-5}^2}{a_n^{10}}+$$
$$\frac{2520a_{n-1}^6a_{n-3}^2a_{n-4}^2}{a_n^{10}}+\frac{2520a_{n-1}^2a_{n-2}^6a_{n-3}^2}{a_n^{10}}+\frac{4950a_{n-1}^8a_{n-2}^2a_{n-4}^2}{a_n^{12}}+\frac{8580a_{n-1}^{10}a_{n-2}^2a_{n-3}^2}{a_n^{14}}+$$
$$\frac{1400a_{n-1}^3a_{n-3}^3a_{n-4}^2}{a_n^8}+\frac{1400a_{n-1}^2a_{n-2}^3a_{n-4}^3}{a_n^8}-\frac{2800a_{n-1}^4a_{n-2}^2a_{n-4}^3}{a_n^9}-\frac{2800a_{n-1}^4a_{n-2}^3a_{n-5}^2}{a_n^9}-$$
$$\frac{2800a_{n-1}^2a_{n-2}^3a_{n-3}^4}{a_n^9}-\frac{8400a_{n-1}^6a_{n-2}^3a_{n-4}^2}{a_n^{11}}+\frac{13200a_{n-1}^7a_{n-2}^2a_{n-3}^3}{a_n^{12}}-$$
$$\frac{19800a_{n-1}^8a_{n-2}^3a_{n-3}^2}{a_n^{13}}+\frac{6300a_{n-1}^4a_{n-2}^4a_{n-4}^2}{a_n^{10}}+\frac{6300a_{n-1}^4a_{n-2}^2a_{n-3}^4}{a_n^{10}}-$$
$$\frac{12600a_{n-1}^4a_{n-2}^5a_{n-3}^2}{a_n^{11}}+\frac{23100a_{n-1}^6a_{n-2}^4a_{n-3}^2}{a_n^{12}}+\frac{8400a_{n-1}^3a_{n-2}^4a_{n-3}^3}{a_n^{10}}-$$
$$\frac{16800a_{n-1}^5a_{n-2}^3a_{n-3}^3}{a_n^{11}}+\frac{120a_{n-1}a_{n-2}a_{n-3}a_{n-14}}{a_n^4}+\frac{120a_{n-1}a_{n-2}a_{n-4}a_{n-13}}{a_n^4}+$$
$$\frac{120a_{n-1}a_{n-2}a_{n-5}a_{n-12}}{a_n^4}+\frac{120a_{n-1}a_{n-2}a_{n-6}a_{n-11}}{a_n^4}+\frac{120a_{n-1}a_{n-2}a_{n-7}a_{n-10}}{a_n^4}+$$
$$\frac{120a_{n-1}a_{n-2}a_{n-8}a_{n-9}}{a_n^4}+\frac{120a_{n-1}a_{n-3}a_{n-4}a_{n-12}}{a_n^4}+\frac{120a_{n-1}a_{n-3}a_{n-5}a_{n-11}}{a_n^4}+$$
$$\frac{120a_{n-1}a_{n-3}a_{n-6}a_{n-10}}{a_n^4}+\frac{120a_{n-1}a_{n-3}a_{n-7}a_{n-9}}{a_n^4}+\frac{120a_{n-1}a_{n-4}a_{n-5}a_{n-10}}{a_n^4}+$$
$$\frac{120a_{n-1}a_{n-4}a_{n-6}a_{n-9}}{a_n^4}+\frac{120a_{n-1}a_{n-4}a_{n-7}a_{n-8}}{a_n^4}+\frac{120a_{n-1}a_{n-5}a_{n-6}a_{n-8}}{a_n^4}+$$
$$\frac{120a_{n-2}a_{n-3}a_{n-4}a_{n-11}}{a_n^4}+\frac{120a_{n-2}a_{n-3}a_{n-5}a_{n-10}}{a_n^4}+\frac{120a_{n-2}a_{n-3}a_{n-6}a_{n-9}}{a_n^4}+$$

$$\frac{120a_{n-2}a_{n-3}a_{n-7}a_{n-8}}{a_n^4}+\frac{120a_{n-2}a_{n-4}a_{n-5}a_{n-9}}{a_n^4}+\frac{120a_{n-2}a_{n-4}a_{n-6}a_{n-8}}{a_n^4}+$$
$$\frac{120a_{n-2}a_{n-5}a_{n-6}a_{n-7}}{a_n^4}+\frac{120a_{n-3}a_{n-4}a_{n-5}a_{n-8}}{a_n^4}+\frac{120a_{n-3}a_{n-4}a_{n-6}a_{n-7}}{a_n^4}-$$
$$\frac{240a_{n-1}^2a_{n-2}a_{n-3}a_{n-13}}{a_n^5}-\frac{240a_{n-1}^2a_{n-2}a_{n-4}a_{n-12}}{a_n^5}-\frac{240a_{n-1}^2a_{n-2}a_{n-5}a_{n-11}}{a_n^5}-$$
$$\frac{240a_{n-1}^2a_{n-2}a_{n-6}a_{n-10}}{a_n^5}-\frac{240a_{n-1}^2a_{n-2}a_{n-7}a_{n-9}}{a_n^5}-\frac{240a_{n-1}^2a_{n-3}a_{n-4}a_{n-11}}{a_n^5}-$$
$$\frac{240a_{n-1}^2a_{n-3}a_{n-5}a_{n-10}}{a_n^5}-\frac{240a_{n-1}^2a_{n-3}a_{n-6}a_{n-9}}{a_n^5}-\frac{240a_{n-1}^2a_{n-3}a_{n-7}a_{n-8}}{a_n^5}-$$
$$\frac{240a_{n-1}^2a_{n-4}a_{n-5}a_{n-9}}{a_n^5}-\frac{240a_{n-1}^2a_{n-4}a_{n-6}a_{n-8}}{a_n^5}-\frac{240a_{n-1}^2a_{n-5}a_{n-6}a_{n-7}}{a_n^5}-$$
$$\frac{240a_{n-1}a_{n-2}^2a_{n-3}a_{n-12}}{a_n^5}-\frac{240a_{n-1}a_{n-2}^2a_{n-4}a_{n-11}}{a_n^5}-\frac{240a_{n-1}a_{n-2}^2a_{n-5}a_{n-10}}{a_n^5}-$$
$$\frac{240a_{n-1}a_{n-2}^2a_{n-6}a_{n-9}}{a_n^5}-\frac{240a_{n-1}a_{n-2}^2a_{n-7}a_{n-8}}{a_n^5}-\frac{240a_{n-1}a_{n-2}a_{n-3}^2a_{n-11}}{a_n^5}-$$
$$\frac{240a_{n-1}a_{n-3}^2a_{n-4}a_{n-9}}{a_n^5}-\frac{240a_{n-1}a_{n-3}^2a_{n-5}a_{n-8}}{a_n^5}-\frac{240a_{n-1}a_{n-3}^2a_{n-6}a_{n-7}}{a_n^5}-$$
$$\frac{240a_{n-1}a_{n-2}a_{n-4}^2a_{n-9}}{a_n^5}-\frac{240a_{n-1}a_{n-3}a_{n-4}^2a_{n-8}}{a_n^5}-\frac{240a_{n-1}a_{n-4}^2a_{n-5}a_{n-6}}{a_n^5}-$$
$$\frac{240a_{n-1}a_{n-2}a_{n-5}^2a_{n-7}}{a_n^5}-\frac{240a_{n-1}a_{n-3}a_{n-5}^2a_{n-6}}{a_n^5}-\frac{240a_{n-1}a_{n-2}a_{n-5}a_{n-6}^2}{a_n^5}-$$
$$\frac{240a_{n-1}a_{n-3}a_{n-4}a_{n-6}^2}{a_n^5}-\frac{240a_{n-1}a_{n-2}a_{n-3}a_{n-7}^2}{a_n^5}-\frac{240a_{n-2}^2a_{n-3}a_{n-4}a_{n-9}}{a_n^5}-$$
$$\frac{240a_{n-2}^2a_{n-3}a_{n-5}a_{n-8}}{a_n^5}-\frac{240a_{n-2}^2a_{n-3}a_{n-6}a_{n-7}}{a_n^5}-\frac{240a_{n-2}^2a_{n-4}a_{n-5}a_{n-7}}{a_n^5}-$$
$$\frac{240a_{n-2}a_{n-3}^2a_{n-4}a_{n-8}}{a_n^5}-\frac{240a_{n-2}a_{n-3}^2a_{n-5}a_{n-7}}{a_n^5}-\frac{240a_{n-2}a_{n-3}a_{n-4}^2a_{n-7}}{a_n^5}+$$
$$\frac{400a_{n-1}^3a_{n-2}a_{n-3}a_{n-12}}{a_n^6}+\frac{400a_{n-1}^3a_{n-2}a_{n-4}a_{n-11}}{a_n^6}+\frac{400a_{n-1}^3a_{n-2}a_{n-5}a_{n-10}}{a_n^6}+$$
$$\frac{400a_{n-1}^3a_{n-2}a_{n-6}a_{n-9}}{a_n^6}+\frac{400a_{n-1}^3a_{n-2}a_{n-7}a_{n-8}}{a_n^6}+\frac{400a_{n-1}^3a_{n-3}a_{n-4}a_{n-10}}{a_n^6}+$$
$$\frac{400a_{n-1}^3a_{n-3}a_{n-5}a_{n-9}}{a_n^6}+\frac{400a_{n-1}^3a_{n-3}a_{n-6}a_{n-8}}{a_n^6}+\frac{400a_{n-1}^3a_{n-4}a_{n-5}a_{n-8}}{a_n^6}+$$
$$\frac{400a_{n-1}^3a_{n-4}a_{n-6}a_{n-7}}{a_n^6}+\frac{400a_{n-1}a_{n-2}^3a_{n-3}a_{n-10}}{a_n^6}+\frac{400a_{n-1}a_{n-2}^3a_{n-4}a_{n-9}}{a_n^6}+$$
$$\frac{400a_{n-1}a_{n-2}^3a_{n-5}a_{n-8}}{a_n^6}+\frac{400a_{n-1}a_{n-2}^3a_{n-6}a_{n-7}}{a_n^6}+\frac{400a_{n-1}a_{n-2}a_{n-3}^3a_{n-8}}{a_n^6}+$$
$$\frac{400a_{n-1}a_{n-3}^3a_{n-4}a_{n-6}}{a_n^6}+\frac{400a_{n-1}a_{n-2}a_{n-4}^3a_{n-5}}{a_n^6}+\frac{400a_{n-2}^3a_{n-3}a_{n-4}a_{n-7}}{a_n^6}+$$
$$\frac{400a_{n-2}^3a_{n-3}a_{n-5}a_{n-6}}{a_n^6}+\frac{400a_{n-2}a_{n-3}^3a_{n-4}a_{n-5}}{a_n^6}-\frac{600a_{n-1}^4a_{n-2}a_{n-3}a_{n-11}}{a_n^7}-$$
$$\frac{600a_{n-1}^4a_{n-2}a_{n-4}a_{n-10}}{a_n^7}-\frac{600a_{n-1}^4a_{n-2}a_{n-5}a_{n-9}}{a_n^7}-\frac{600a_{n-1}^4a_{n-2}a_{n-6}a_{n-8}}{a_n^7}-$$
$$\frac{600a_{n-1}^4a_{n-3}a_{n-4}a_{n-9}}{a_n^7}-\frac{600a_{n-1}^4a_{n-3}a_{n-5}a_{n-8}}{a_n^7}-\frac{600a_{n-1}^4a_{n-3}a_{n-6}a_{n-7}}{a_n^7}-$$
$$\frac{600a_{n-1}^4a_{n-4}a_{n-5}a_{n-7}}{a_n^7}-\frac{600a_{n-1}a_{n-2}^4a_{n-3}a_{n-8}}{a_n^7}-\frac{600a_{n-1}a_{n-2}^4a_{n-4}a_{n-7}}{a_n^7}-$$

$$\frac{600a_{n-1}a_{n-2}^4a_{n-5}a_{n-6}}{a_n^7} - \frac{600a_{n-1}a_{n-2}a_{n-3}^4a_{n-5}}{a_n^7} - \frac{600a_{n-2}^4a_{n-3}a_{n-4}a_{n-5}}{a_n^7} +$$
$$\frac{840a_{n-1}^5a_{n-2}a_{n-3}a_{n-10}}{a_n^8} + \frac{840a_{n-1}^5a_{n-2}a_{n-4}a_{n-9}}{a_n^8} + \frac{840a_{n-1}^5a_{n-2}a_{n-5}a_{n-8}}{a_n^8} +$$
$$\frac{840a_{n-1}^5a_{n-2}a_{n-6}a_{n-7}}{a_n^8} + \frac{840a_{n-1}^5a_{n-3}a_{n-4}a_{n-8}}{a_n^8} + \frac{840a_{n-1}^5a_{n-3}a_{n-5}a_{n-7}}{a_n^8} +$$
$$\frac{840a_{n-1}^5a_{n-4}a_{n-5}a_{n-6}}{a_n^8} + \frac{840a_{n-1}a_{n-2}^5a_{n-3}a_{n-6}}{a_n^8} + \frac{840a_{n-1}a_{n-2}^5a_{n-4}a_{n-5}}{a_n^8} -$$
$$\frac{1120a_{n-1}^6a_{n-2}a_{n-3}a_{n-9}}{a_n^9} - \frac{1120a_{n-1}^6a_{n-2}a_{n-4}a_{n-8}}{a_n^9} - \frac{1120a_{n-1}^6a_{n-2}a_{n-5}a_{n-7}}{a_n^9} -$$
$$\frac{1120a_{n-1}^6a_{n-3}a_{n-4}a_{n-7}}{a_n^9} - \frac{1120a_{n-1}^6a_{n-3}a_{n-5}a_{n-6}}{a_n^9} - \frac{1120a_{n-1}a_{n-2}^6a_{n-3}a_{n-4}}{a_n^9} +$$
$$\frac{1440a_{n-1}^7a_{n-2}a_{n-3}a_{n-8}}{a_n^{10}} + \frac{1440a_{n-1}^7a_{n-2}a_{n-4}a_{n-7}}{a_n^{10}} + \frac{1440a_{n-1}^7a_{n-2}a_{n-5}a_{n-6}}{a_n^{10}} +$$
$$\frac{1440a_{n-1}^7a_{n-3}a_{n-4}a_{n-6}}{a_n^{10}} - \frac{1800a_{n-1}^8a_{n-2}a_{n-3}a_{n-7}}{a_n^{11}} - \frac{1800a_{n-1}^8a_{n-2}a_{n-4}a_{n-6}}{a_n^{11}} -$$
$$\frac{1800a_{n-1}^8a_{n-3}a_{n-4}a_{n-5}}{a_n^{11}} + \frac{2200a_{n-1}^9a_{n-2}a_{n-3}a_{n-6}}{a_n^{12}} + \frac{2200a_{n-1}^9a_{n-2}a_{n-4}a_{n-5}}{a_n^{12}} -$$
$$\frac{2640a_{n-1}^{10}a_{n-2}a_{n-3}a_{n-5}}{a_n^{13}} + \frac{3120a_{n-1}^{11}a_{n-2}a_{n-3}a_{n-4}}{a_n^{14}} + \frac{600a_{n-1}^2a_{n-2}^2a_{n-3}a_{n-11}}{a_n^6} +$$
$$\frac{600a_{n-1}^2a_{n-2}^2a_{n-4}a_{n-10}}{a_n^6} + \frac{600a_{n-1}^2a_{n-2}^2a_{n-5}a_{n-9}}{a_n^6} + \frac{600a_{n-1}^2a_{n-2}^2a_{n-6}a_{n-8}}{a_n^6} +$$
$$\frac{600a_{n-1}^2a_{n-2}a_{n-3}^2a_{n-10}}{a_n^6} + \frac{600a_{n-1}^2a_{n-3}^2a_{n-4}a_{n-8}}{a_n^6} + \frac{600a_{n-1}^2a_{n-3}^2a_{n-5}a_{n-7}}{a_n^6} +$$
$$\frac{600a_{n-1}^2a_{n-2}a_{n-4}^2a_{n-8}}{a_n^6} + \frac{600a_{n-1}^2a_{n-3}a_{n-4}^2a_{n-7}}{a_n^6} + \frac{600a_{n-1}^2a_{n-2}a_{n-5}^2a_{n-6}}{a_n^6} +$$
$$\frac{600a_{n-1}^2a_{n-2}a_{n-4}a_{n-6}^2}{a_n^6} + \frac{600a_{n-1}a_{n-2}^2a_{n-3}^2a_{n-9}}{a_n^6} + \frac{600a_{n-1}a_{n-2}^2a_{n-4}^2a_{n-7}}{a_n^6} +$$
$$\frac{600a_{n-1}a_{n-2}^2a_{n-3}a_{n-6}^2}{a_n^6} + \frac{600a_{n-1}a_{n-3}^2a_{n-4}^2a_{n-5}}{a_n^6} + \frac{600a_{n-2}^2a_{n-3}^2a_{n-4}a_{n-6}}{a_n^6} +$$
$$\frac{600a_{n-2}^2a_{n-3}a_{n-4}^2a_{n-5}}{a_n^6} - \frac{1200a_{n-1}^3a_{n-2}^2a_{n-3}a_{n-10}}{a_n^7} - \frac{1200a_{n-1}^3a_{n-2}^2a_{n-4}a_{n-9}}{a_n^7} -$$
$$\frac{1200a_{n-1}^3a_{n-2}^2a_{n-5}a_{n-8}}{a_n^7} - \frac{1200a_{n-1}^3a_{n-2}^2a_{n-6}a_{n-7}}{a_n^7} - \frac{1200a_{n-1}^3a_{n-2}a_{n-3}^2a_{n-9}}{a_n^7} -$$
$$\frac{1200a_{n-1}^3a_{n-3}^2a_{n-4}a_{n-7}}{a_n^7} - \frac{1200a_{n-1}^3a_{n-3}^2a_{n-5}a_{n-6}}{a_n^7} - \frac{1200a_{n-1}^3a_{n-2}a_{n-4}^2a_{n-7}}{a_n^7} -$$
$$\frac{1200a_{n-1}^3a_{n-3}a_{n-4}^2a_{n-6}}{a_n^7} - \frac{1200a_{n-1}^3a_{n-3}a_{n-4}a_{n-5}^2}{a_n^7} - \frac{1200a_{n-1}^3a_{n-2}a_{n-3}a_{n-6}^2}{a_n^7} -$$
$$\frac{1200a_{n-1}^2a_{n-2}^3a_{n-3}a_{n-9}}{a_n^7} - \frac{1200a_{n-1}^2a_{n-2}^3a_{n-4}a_{n-8}}{a_n^7} - \frac{1200a_{n-1}^2a_{n-2}^3a_{n-5}a_{n-7}}{a_n^7} -$$
$$\frac{1200a_{n-1}^2a_{n-2}a_{n-3}^3a_{n-7}}{a_n^7} - \frac{1200a_{n-1}^2a_{n-3}^3a_{n-4}a_{n-5}}{a_n^7} - \frac{1200a_{n-1}a_{n-2}^3a_{n-3}^2a_{n-7}}{a_n^7} -$$
$$\frac{1200a_{n-1}a_{n-2}^3a_{n-3}^2a_{n-4}^2a_{n-5}}{a_n^7} - \frac{1200a_{n-1}a_{n-2}^2a_{n-3}^3a_{n-6}}{a_n^7} - \frac{1200a_{n-1}a_{n-2}^2a_{n-3}a_{n-4}^3}{a_n^7} -$$
$$\frac{12000a_{n-1}a_{n-2}^3a_{n-3}a_{n-5}^2}{a_n^7} - \frac{12000a_{n-1}a_{n-2}a_{n-3}^3a_{n-4}^2}{a_n^7} + \frac{2100a_{n-1}^4a_{n-2}^2a_{n-3}a_{n-9}}{a_n^8} +$$
$$\frac{2100a_{n-1}^4a_{n-2}^2a_{n-4}a_{n-8}}{a_n^8} + \frac{2100a_{n-1}^4a_{n-2}^2a_{n-5}a_{n-7}}{a_n^8} + \frac{2100a_{n-1}^4a_{n-2}a_{n-3}^2a_{n-8}}{a_n^8} +$$

$$\frac{2100a_{n-1}^4a_{n-3}^2a_{n-4}a_{n-6}}{a_n^8}+\frac{2100a_{n-1}^4a_{n-2}a_{n-4}^2a_{n-6}}{a_n^8}+\frac{2100a_{n-1}^4a_{n-3}a_{n-4}^2a_{n-5}}{a_n^8}+$$
$$\frac{2100a_{n-1}^4a_{n-2}a_{n-4}a_{n-5}^2}{a_n^8}+\frac{2100a_{n-1}^2a_{n-2}^4a_{n-3}a_{n-7}}{a_n^8}+\frac{2100a_{n-1}^2a_{n-2}^4a_{n-4}a_{n-6}}{a_n^8}+$$
$$\frac{2100a_{n-1}^2a_{n-2}a_{n-3}^4a_{n-4}}{a_n^8}+\frac{2100a_{n-1}a_{n-2}^4a_{n-3}^2a_{n-5}}{a_n^8}+\frac{2100a_{n-1}a_{n-2}^4a_{n-3}a_{n-4}^2}{a_n^8}-$$
$$\frac{3360a_{n-1}^5a_{n-2}^2a_{n-3}a_{n-8}}{a_n^9}-\frac{3360a_{n-1}^5a_{n-2}^2a_{n-4}a_{n-7}}{a_n^9}-\frac{3360a_{n-1}^5a_{n-2}^2a_{n-5}a_{n-6}}{a_n^9}-$$
$$\frac{3360a_{n-1}^5a_{n-2}a_{n-3}^2a_{n-7}}{a_n^9}-\frac{3360a_{n-1}^5a_{n-3}^2a_{n-4}a_{n-5}}{a_n^9}-\frac{3360a_{n-1}^5a_{n-2}a_{n-4}^2a_{n-5}}{a_n^9}-$$
$$\frac{3360a_{n-1}^5a_{n-2}a_{n-3}a_{n-5}^2}{a_n^9}-\frac{3360a_{n-1}^2a_{n-2}^5a_{n-3}a_{n-5}}{a_n^9}+\frac{5040a_{n-1}^6a_{n-2}^2a_{n-3}a_{n-7}}{a_n^{10}}+$$
$$\frac{5040a_{n-1}^6a_{n-2}^2a_{n-4}a_{n-6}}{a_n^{10}}+\frac{5040a_{n-1}^6a_{n-2}a_{n-3}^2a_{n-6}}{a_n^{10}}-\frac{7200a_{n-1}^7a_{n-2}^2a_{n-3}a_{n-6}}{a_n^{11}}-$$
$$\frac{7200a_{n-1}^7a_{n-2}^2a_{n-4}a_{n-5}}{a_n^{11}}-\frac{7200a_{n-1}^7a_{n-2}a_{n-3}^2a_{n-5}}{a_n^{11}}-\frac{7200a_{n-1}^7a_{n-2}a_{n-3}a_{n-4}^2}{a_n^{11}}+$$
$$\frac{9900a_{n-1}^8a_{n-2}^2a_{n-3}a_{n-5}}{a_n^{12}}+\frac{9900a_{n-1}^8a_{n-2}a_{n-3}^2a_{n-4}}{a_n^{12}}-\frac{13200a_{n-1}^9a_{n-2}^2a_{n-3}a_{n-4}}{a_n^{13}}+$$
$$\frac{2800a_{n-1}^3a_{n-2}^3a_{n-3}a_{n-8}}{a_n^8}+\frac{2800a_{n-1}^3a_{n-2}^3a_{n-4}a_{n-7}}{a_n^8}+\frac{2800a_{n-1}^3a_{n-2}^3a_{n-5}a_{n-6}}{a_n^8}+$$
$$\frac{2800a_{n-1}^3a_{n-2}a_{n-3}^3a_{n-6}}{a_n^8}+\frac{2800a_{n-1}^3a_{n-2}a_{n-3}a_{n-4}^3}{a_n^8}+\frac{2800a_{n-1}a_{n-2}^3a_{n-3}^3a_{n-4}}{a_n^8}-$$
$$\frac{5600a_{n-1}^4a_{n-2}^3a_{n-3}a_{n-7}}{a_n^9}-\frac{5600a_{n-1}^4a_{n-2}^3a_{n-4}a_{n-6}}{a_n^9}-\frac{5600a_{n-1}^4a_{n-2}a_{n-3}^3a_{n-5}}{a_n^9}-$$
$$\frac{5600a_{n-1}^3a_{n-2}^4a_{n-3}a_{n-6}}{a_n^9}-\frac{5600a_{n-1}^3a_{n-2}^4a_{n-4}a_{n-5}}{a_n^9}+\frac{10080a_{n-1}^5a_{n-2}^3a_{n-3}a_{n-6}}{a_n^{10}}+$$
$$\frac{10080a_{n-1}^5a_{n-2}^3a_{n-4}a_{n-5}}{a_n^{10}}+\frac{10080a_{n-1}^5a_{n-2}a_{n-3}^3a_{n-4}}{a_n^{10}}+\frac{10080a_{n-1}^3a_{n-2}^5a_{n-3}a_{n-4}}{a_n^{10}}-$$
$$\frac{16800a_{n-1}^6a_{n-2}^3a_{n-3}a_{n-5}}{a_n^{11}}+\frac{26400a_{n-1}^7a_{n-2}^3a_{n-3}a_{n-4}}{a_n^{12}}+\frac{12600a_{n-1}^4a_{n-2}^4a_{n-3}a_{n-5}}{a_n^{10}}-$$
$$\frac{25200a_{n-1}^5a_{n-2}^4a_{n-3}a_{n-4}}{a_n^{11}}-\frac{1800a_{n-1}^2a_{n-2}^2a_{n-3}^2a_{n-8}}{a_n^7}-\frac{1800a_{n-1}^2a_{n-2}^2a_{n-4}^2a_{n-6}}{a_n^7}-$$
$$\frac{1800a_{n-1}^2a_{n-2}^2a_{n-4}a_{n-5}^2}{a_n^7}-\frac{1800a_{n-1}^2a_{n-2}a_{n-3}^2a_{n-5}^2}{a_n^7}+\frac{4200a_{n-1}^3a_{n-2}^2a_{n-3}^2a_{n-7}}{a_n^8}+$$
$$\frac{4200a_{n-1}^3a_{n-2}^2a_{n-4}^2a_{n-5}}{a_n^8}+\frac{4200a_{n-1}^3a_{n-2}^2a_{n-3}a_{n-5}^2}{a_n^8}+\frac{4200a_{n-1}^2a_{n-2}^3a_{n-3}^2a_{n-6}}{a_n^8}+$$
$$\frac{4200a_{n-1}^2a_{n-2}^2a_{n-3}^3a_{n-5}}{a_n^8}-\frac{8400a_{n-1}^4a_{n-2}^2a_{n-3}^2a_{n-6}}{a_n^9}-\frac{8400a_{n-1}^4a_{n-2}a_{n-3}^2a_{n-4}^2}{a_n^9}-$$
$$\frac{8400a_{n-1}^2a_{n-2}^4a_{n-3}^2a_{n-4}}{a_n^9}+\frac{15120a_{n-1}^5a_{n-2}^2a_{n-3}^2a_{n-5}}{a_n^{10}}+\frac{15120a_{n-1}^5a_{n-2}^2a_{n-3}a_{n-4}^2}{a_n^{10}}-$$
$$\frac{25200a_{n-1}^6a_{n-2}^2a_{n-3}^2a_{n-4}}{a_n^{11}}-\frac{11200a_{n-1}^3a_{n-2}^3a_{n-3}^2a_{n-5}}{a_n^9}-\frac{11200a_{n-1}^3a_{n-2}^3a_{n-3}a_{n-4}^2}{a_n^9}-$$
$$\frac{11200a_{n-1}^3a_{n-2}^2a_{n-3}^3a_{n-4}}{a_n^9}+\frac{25200a_{n-1}^4a_{n-2}^3a_{n-3}^2a_{n-4}}{a_n^{10}}+\frac{6300a_{n-1}^2a_{n-2}^2a_{n-3}^2a_{n-4}^2}{a_n^8}-$$
$$\frac{480a_{n-1}a_{n-2}a_{n-3}a_{n-4}a_{n-10}}{a_n^5}-\frac{480a_{n-1}a_{n-2}a_{n-3}a_{n-5}a_{n-9}}{a_n^5}-$$
$$\frac{480a_{n-1}a_{n-2}a_{n-3}a_{n-6}a_{n-8}}{a_n^5}-\frac{480a_{n-1}a_{n-2}a_{n-4}a_{n-5}a_{n-8}}{a_n^5}-$$

$$\frac{480a_{n-1}a_{n-2}a_{n-4}a_{n-6}a_{n-7}}{a_n^5} - \frac{480a_{n-1}a_{n-3}a_{n-4}a_{n-5}a_{n-7}}{a_n^5} -$$
$$\frac{480a_{n-2}a_{n-3}a_{n-4}a_{n-5}a_{n-6}}{a_n^5} + \frac{1200a_{n-1}^2a_{n-2}a_{n-3}a_{n-4}a_{n-9}}{a_n^6} +$$
$$\frac{1200a_{n-1}^2a_{n-2}a_{n-3}a_{n-5}a_{n-8}}{a_n^6} + \frac{1200a_{n-1}^2a_{n-2}a_{n-3}a_{n-6}a_{n-7}}{a_n^6} +$$
$$\frac{1200a_{n-1}^2a_{n-2}a_{n-4}a_{n-5}a_{n-7}}{a_n^6} + \frac{1200a_{n-1}^2a_{n-3}a_{n-4}a_{n-5}a_{n-6}}{a_n^6} +$$
$$\frac{1200a_{n-1}a_{n-2}^2a_{n-3}a_{n-4}a_{n-8}}{a_n^6} + \frac{1200a_{n-1}a_{n-2}^2a_{n-3}a_{n-5}a_{n-7}}{a_n^6} +$$
$$\frac{1200a_{n-1}a_{n-2}^2a_{n-4}a_{n-5}a_{n-6}}{a_n^6} + \frac{1200a_{n-1}a_{n-2}a_{n-3}^2a_{n-4}a_{n-7}}{a_n^6} +$$
$$\frac{1200a_{n-1}a_{n-2}a_{n-3}^2a_{n-5}a_{n-6}}{a_n^6} + \frac{1200a_{n-1}a_{n-2}a_{n-3}a_{n-4}^2a_{n-6}}{a_n^6} +$$
$$\frac{1200a_{n-1}a_{n-2}a_{n-3}a_{n-4}a_{n-5}^2}{a_n^6} - \frac{2400a_{n-1}^3a_{n-2}a_{n-3}a_{n-4}a_{n-8}}{a_n^7} -$$
$$\frac{2400a_{n-1}^3a_{n-2}a_{n-3}a_{n-5}a_{n-7}}{a_n^7} - \frac{2400a_{n-1}^3a_{n-2}a_{n-4}a_{n-5}a_{n-6}}{a_n^7} -$$
$$\frac{2400a_{n-1}a_{n-2}^3a_{n-3}a_{n-4}a_{n-6}}{a_n^7} + \frac{4200a_{n-1}^4a_{n-2}a_{n-3}a_{n-4}a_{n-7}}{a_n^8} +$$
$$\frac{4200a_{n-1}^4a_{n-2}a_{n-3}a_{n-5}a_{n-6}}{a_n^8} - \frac{6720a_{n-1}^5a_{n-2}a_{n-3}a_{n-4}a_{n-6}}{a_n^9} +$$
$$\frac{10080a_{n-1}^6a_{n-2}a_{n-3}a_{n-4}a_{n-5}}{a_n^{10}} - \frac{3600a_{n-1}^2a_{n-2}^2a_{n-3}a_{n-4}a_{n-7}}{a_n^7} -$$
$$\frac{3600a_{n-1}^2a_{n-2}^2a_{n-3}a_{n-5}a_{n-6}}{a_n^7} - \frac{3600a_{n-1}^2a_{n-2}a_{n-3}^2a_{n-4}a_{n-6}}{a_n^7} -$$
$$\frac{3600a_{n-1}^2a_{n-2}a_{n-3}a_{n-4}^2a_{n-5}}{a_n^7} - \frac{3600a_{n-1}a_{n-2}^2a_{n-3}^2a_{n-4}a_{n-5}}{a_n^7} +$$
$$\frac{8400a_{n-1}^3a_{n-2}^2a_{n-3}a_{n-4}a_{n-6}}{a_n^8} + \frac{8400a_{n-1}^3a_{n-2}a_{n-3}^2a_{n-4}a_{n-5}}{a_n^8} +$$
$$\frac{8400a_{n-1}^2a_{n-2}^3a_{n-3}a_{n-4}a_{n-5}}{a_n^8} - \frac{16800a_{n-1}^4a_{n-2}^2a_{n-3}a_{n-4}a_{n-5}}{a_n^9}$$