

Target equation:

$$\begin{aligned}
& -ia_1u^{(1,0)}(x,t)+a_{10}u^{(10,0)}(x,t)-ia_{11}u^{(11,0)}(x,t)+a_{12}u^{(12,0)}(x,t)-ia_{13}u^{(13,0)}(x,t)+a_{14}u^{(14,0)}(x,t)- \\
& ia_{15}u^{(15,0)}(x,t)+a_{16}u^{(16,0)}(x,t)-ia_{17}u^{(17,0)}(x,t)+a_{18}u^{(18,0)}(x,t)-ia_{19}u^{(19,0)}(x,t)+a_2u^{(2,0)}(x,t)+ \\
& a_{20}u^{(20,0)}(x,t)-ia_{21}u^{(21,0)}(x,t)+a_{22}u^{(22,0)}(x,t)-ia_{23}u^{(23,0)}(x,t)+a_{24}u^{(24,0)}(x,t)-ia_{25}u^{(25,0)}(x,t)+ \\
& a_{26}u^{(26,0)}(x,t)-ia_{27}u^{(27,0)}(x,t)+a_{28}u^{(28,0)}(x,t)-ia_{29}u^{(29,0)}(x,t)-ia_3u^{(3,0)}(x,t)+a_{30}u^{(30,0)}(x,t)- \\
& ia_{31}u^{(31,0)}(x,t)+a_{32}u^{(32,0)}(x,t)+a_4u^{(4,0)}(x,t)-ia_5u^{(5,0)}(x,t)+a_6u^{(6,0)}(x,t)-ia_7u^{(7,0)}(x,t)+ \\
& a_8u^{(8,0)}(x,t)-ia_9u^{(9,0)}(x,t)-bu(x,t)|u(x,t)|^2+iu^{(0,1)}(x,t)=0
\end{aligned}$$

Substitutions:

$$N = 16$$

$$u(x,t) \rightarrow y(z)e^{i(kx-\omega t)}$$

$$z \rightarrow x - C_0t$$

$$y(z) \rightarrow AR(z)^{16}$$

$$R'(z)^2 = R(z)^2 (1 - \chi R(z)^2)$$

Imaginary part of equation after substitutions:

$$\begin{aligned}
& 201376a_{32}y^{(5)}(z)k^{27}-169911a_{31}y^{(5)}(z)k^{26}-142506a_{30}y^{(5)}(z)k^{25}-3365856a_{32}y^{(7)}(z)k^{25}+118755a_{29}y^{(5)}(z)k^{24}- \\
& 2629575a_{31}y^{(7)}(z)k^{24}+98280a_{28}y^{(5)}(z)k^{23}+2035800a_{30}y^{(7)}(z)k^{23}+28048800a_{32}y^{(9)}(z)k^{23}-80730a_{27}y^{(5)}(z)k^{22}- \\
& 1560780a_{29}y^{(7)}(z)k^{22}-20160075a_{31}y^{(9)}(z)k^{22}-65780a_{26}y^{(5)}(z)k^{21}-1184040a_{28}y^{(7)}(z)k^{21}-14307150a_{30}y^{(9)}(z)k^{21}- \\
& 129024480a_{32}y^{(11)}(z)k^{21}+53130a_{25}y^{(5)}(z)k^{20}+888030a_{27}y^{(7)}(z)k^{20}+10015005a_{29}y^{(9)}(z)k^{20}+ \\
& 84672315a_{31}y^{(11)}(z)k^{20}+42504a_{24}y^{(5)}(z)k^{19}+657800a_{26}y^{(7)}(z)k^{19}+6906900a_{28}y^{(9)}(z)k^{19}+54627300a_{30}y^{(11)}(z)k^{19}- \\
& 347373600a_{32}y^{(13)}(z)k^{19}-33649a_{23}y^{(5)}(z)k^{18}-480700a_{25}y^{(7)}(z)k^{18}-4686825a_{27}y^{(9)}(z)k^{18}- \\
& 34597290a_{29}y^{(11)}(z)k^{18}-206253075a_{31}y^{(13)}(z)k^{18}-26334a_{22}y^{(5)}(z)k^{17}-346104a_{24}y^{(7)}(z)k^{17}- \\
& 3124550a_{26}y^{(9)}(z)k^{17}-21474180a_{28}y^{(11)}(z)k^{17}-119759850a_{30}y^{(13)}(z)k^{17}-565722720a_{32}y^{(15)}(z)k^{17}+ \\
& 20349a_{21}y^{(5)}(z)k^{16}+245157a_{23}y^{(7)}(z)k^{16}+2042975a_{25}y^{(9)}(z)k^{16}+13037895a_{27}y^{(11)}(z)k^{16}+67863915a_{29}y^{(13)}(z)k^{16}- \\
& 300540195a_{31}y^{(15)}(z)k^{16}+15504a_{20}y^{(5)}(z)k^{15}+170544a_{22}y^{(7)}(z)k^{15}+1307504a_{24}y^{(9)}(z)k^{15}+7726160a_{26}y^{(11)}(z)k^{15}- \\
& 37442160a_{28}y^{(13)}(z)k^{15}+155117520a_{30}y^{(15)}(z)k^{15}+565722720a_{32}y^{(17)}(z)k^{15}-11628a_{19}y^{(5)}(z)k^{14}- \\
& 116280a_{21}y^{(7)}(z)k^{14}-817190a_{23}y^{(9)}(z)k^{14}-4457400a_{25}y^{(11)}(z)k^{14}-20058300a_{27}y^{(13)}(z)k^{14}- \\
& 77558760a_{29}y^{(15)}(z)k^{14}-265182525a_{31}y^{(17)}(z)k^{14}-8568a_{18}y^{(5)}(z)k^{13}-77520a_{20}y^{(7)}(z)k^{13}-497420a_{22}y^{(9)}(z)k^{13}- \\
& 2496144a_{24}y^{(11)}(z)k^{13}-10400600a_{26}y^{(13)}(z)k^{13}-37442160a_{28}y^{(15)}(z)k^{13}-119759850a_{30}y^{(17)}(z)k^{13}- \\
& 347373600a_{32}y^{(19)}(z)k^{13}+6188a_{17}y^{(5)}(z)k^{12}+50388a_{19}y^{(7)}(z)k^{12}+293930a_{21}y^{(9)}(z)k^{12}+1352078a_{23}y^{(11)}(z)k^{12}- \\
& 5200300a_{25}y^{(13)}(z)k^{12}+17383860a_{27}y^{(15)}(z)k^{12}+51895935a_{29}y^{(17)}(z)k^{12}+141120525a_{31}y^{(19)}(z)k^{12}+ \\
& 4368a_{16}y^{(5)}(z)k^{11}+31824a_{18}y^{(7)}(z)k^{11}+167960a_{20}y^{(9)}(z)k^{11}+705432a_{22}y^{(11)}(z)k^{11}+2496144a_{24}y^{(13)}(z)k^{11}+ \\
& 7726160a_{26}y^{(15)}(z)k^{11}+21474180a_{28}y^{(17)}(z)k^{11}+54627300a_{30}y^{(19)}(z)k^{11}+129024480a_{32}y^{(21)}(z)k^{11}- \\
& 3003a_{15}y^{(5)}(z)k^{10}-19448a_{17}y^{(7)}(z)k^{10}-92378a_{19}y^{(9)}(z)k^{10}-352716a_{21}y^{(11)}(z)k^{10}-1144066a_{23}y^{(13)}(z)k^{10}- \\
& 3268760a_{25}y^{(15)}(z)k^{10}-8436285a_{27}y^{(17)}(z)k^{10}-20030010a_{29}y^{(19)}(z)k^{10}-44352165a_{31}y^{(21)}(z)k^{10}-
\end{aligned}$$

$$\begin{aligned}
& 5311735a_{26}y^{(10)}(z)k^{16}+30421755a_{28}y^{(12)}(z)k^{16}+145422675a_{30}y^{(14)}(z)k^{16}+601080390a_{32}y^{(16)}(z)k^{16}- \\
& 3876a_{19}y^{(4)}(z)k^{15}-54264a_{21}y^{(6)}(z)k^{15}-490314a_{23}y^{(8)}(z)k^{15}-3268760a_{25}y^{(10)}(z)k^{15}-17383860a_{27}y^{(12)}(z)k^{15}- \\
& 77558760a_{29}y^{(14)}(z)k^{15}-300540195a_{31}y^{(16)}(z)k^{15}-3060a_{18}y^{(4)}(z)k^{14}-38760a_{20}y^{(6)}(z)k^{14}-319770a_{22}y^{(8)}(z)k^{14}- \\
& 1961256a_{24}y^{(10)}(z)k^{14}-9657700a_{26}y^{(12)}(z)k^{14}-40116600a_{28}y^{(14)}(z)k^{14}-145422675a_{30}y^{(16)}(z)k^{14}- \\
& 471435600a_{32}y^{(18)}(z)k^{14}+2380a_{17}y^{(4)}(z)k^{13}+27132a_{19}y^{(6)}(z)k^{13}+203490a_{21}y^{(8)}(z)k^{13}+1144066a_{23}y^{(10)}(z)k^{13}- \\
& 5200300a_{25}y^{(12)}(z)k^{13}+20058300a_{27}y^{(14)}(z)k^{13}+67863915a_{29}y^{(16)}(z)k^{13}+206253075a_{31}y^{(18)}(z)k^{13}+ \\
& 1820a_{16}y^{(4)}(z)k^{12}+18564a_{18}y^{(6)}(z)k^{12}+125970a_{20}y^{(8)}(z)k^{12}+646646a_{22}y^{(10)}(z)k^{12}+2704156a_{24}y^{(12)}(z)k^{12}+ \\
& 9657700a_{26}y^{(14)}(z)k^{12}+30421755a_{28}y^{(16)}(z)k^{12}+86493225a_{30}y^{(18)}(z)k^{12}+225792840a_{32}y^{(20)}(z)k^{12}- \\
& 1365a_{15}y^{(4)}(z)k^{11}-12376a_{17}y^{(6)}(z)k^{11}-75582a_{19}y^{(8)}(z)k^{11}-352716a_{21}y^{(10)}(z)k^{11}-1352078a_{23}y^{(12)}(z)k^{11}- \\
& 4457400a_{25}y^{(14)}(z)k^{11}-13037895a_{27}y^{(16)}(z)k^{11}-34597290a_{29}y^{(18)}(z)k^{11}-84672315a_{31}y^{(20)}(z)k^{11}- \\
& 1001a_{14}y^{(4)}(z)k^{10}-8008a_{16}y^{(6)}(z)k^{10}-43758a_{18}y^{(8)}(z)k^{10}-184756a_{20}y^{(10)}(z)k^{10}-646646a_{22}y^{(12)}(z)k^{10}- \\
& 1961256a_{24}y^{(14)}(z)k^{10}-5311735a_{26}y^{(16)}(z)k^{10}-13123110a_{28}y^{(18)}(z)k^{10}-30045015a_{30}y^{(20)}(z)k^{10}- \\
& 64512240a_{32}y^{(22)}(z)k^{10}+715a_{13}y^{(4)}(z)k^9+5005a_{15}y^{(6)}(z)k^9+24310a_{17}y^{(8)}(z)k^9+92378a_{19}y^{(10)}(z)k^9+ \\
& 293930a_{21}y^{(12)}(z)k^9+817190a_{23}y^{(14)}(z)k^9+2042975a_{25}y^{(16)}(z)k^9+4686825a_{27}y^{(18)}(z)k^9+10015005a_{29}y^{(20)}(z)k^9+ \\
& 20160075a_{31}y^{(22)}(z)k^9+495a_{12}y^{(4)}(z)k^8+3003a_{14}y^{(6)}(z)k^8+12870a_{16}y^{(8)}(z)k^8+43758a_{18}y^{(10)}(z)k^8+ \\
& 125970a_{20}y^{(12)}(z)k^8+319770a_{22}y^{(14)}(z)k^8+735471a_{24}y^{(16)}(z)k^8+1562275a_{26}y^{(18)}(z)k^8+3108105a_{28}y^{(20)}(z)k^8+ \\
& 5852925a_{30}y^{(22)}(z)k^8+10518300a_{32}y^{(24)}(z)k^8-330a_{11}y^{(4)}(z)k^7-1716a_{13}y^{(6)}(z)k^7-6435a_{15}y^{(8)}(z)k^7- \\
& 19448a_{17}y^{(10)}(z)k^7-50388a_{19}y^{(12)}(z)k^7-116280a_{21}y^{(14)}(z)k^7-245157a_{23}y^{(16)}(z)k^7-480700a_{25}y^{(18)}(z)k^7- \\
& 888030a_{27}y^{(20)}(z)k^7-1560780a_{29}y^{(22)}(z)k^7-2629575a_{31}y^{(24)}(z)k^7-210a_{10}y^{(4)}(z)k^6-924a_{12}y^{(6)}(z)k^6- \\
& 3003a_{14}y^{(8)}(z)k^6-8008a_{16}y^{(10)}(z)k^6-18564a_{18}y^{(12)}(z)k^6-38760a_{20}y^{(14)}(z)k^6-74613a_{22}y^{(16)}(z)k^6- \\
& 134596a_{24}y^{(18)}(z)k^6-230230a_{26}y^{(20)}(z)k^6-376740a_{28}y^{(22)}(z)k^6-593775a_{30}y^{(24)}(z)k^6-906192a_{32}y^{(26)}(z)k^6+ \\
& 126a_9y^{(4)}(z)k^5+462a_{11}y^{(6)}(z)k^5+1287a_{13}y^{(8)}(z)k^5+3003a_{15}y^{(10)}(z)k^5+6188a_{17}y^{(12)}(z)k^5+ \\
& 11628a_{19}y^{(14)}(z)k^5+20349a_{21}y^{(16)}(z)k^5+33649a_{23}y^{(18)}(z)k^5+53130a_{25}y^{(20)}(z)k^5+80730a_{27}y^{(22)}(z)k^5+ \\
& 118755a_{29}y^{(24)}(z)k^5+169911a_{31}y^{(26)}(z)k^5+70a_8y^{(4)}(z)k^4+210a_{10}y^{(6)}(z)k^4+495a_{12}y^{(8)}(z)k^4+ \\
& 1001a_{14}y^{(10)}(z)k^4+1820a_{16}y^{(12)}(z)k^4+3060a_{18}y^{(14)}(z)k^4+4845a_{20}y^{(16)}(z)k^4+7315a_{22}y^{(18)}(z)k^4+ \\
& 10626a_{24}y^{(20)}(z)k^4+14950a_{26}y^{(22)}(z)k^4+20475a_{28}y^{(24)}(z)k^4+27405a_{30}y^{(26)}(z)k^4+35960a_{32}y^{(28)}(z)k^4- \\
& 35a_7y^{(4)}(z)k^3-84a_9y^{(6)}(z)k^3-165a_{11}y^{(8)}(z)k^3-286a_{13}y^{(10)}(z)k^3-455a_{15}y^{(12)}(z)k^3-680a_{17}y^{(14)}(z)k^3- \\
& 969a_{19}y^{(16)}(z)k^3-1330a_{21}y^{(18)}(z)k^3-1771a_{23}y^{(20)}(z)k^3-2300a_{25}y^{(22)}(z)k^3-2925a_{27}y^{(24)}(z)k^3- \\
& 3654a_{29}y^{(26)}(z)k^3-4495a_{31}y^{(28)}(z)k^3-15a_6y^{(4)}(z)k^2-28a_8y^{(6)}(z)k^2-45a_{10}y^{(8)}(z)k^2-66a_{12}y^{(10)}(z)k^2- \\
& 91a_{14}y^{(12)}(z)k^2-120a_{16}y^{(14)}(z)k^2-153a_{18}y^{(16)}(z)k^2-190a_{20}y^{(18)}(z)k^2-231a_{22}y^{(20)}(z)k^2- \\
& 276a_{24}y^{(22)}(z)k^2-325a_{26}y^{(24)}(z)k^2-378a_{28}y^{(26)}(z)k^2-435a_{30}y^{(28)}(z)k^2-496a_{32}y^{(30)}(z)k^2+ \\
& 5a_5y^{(4)}(z)k+7a_7y^{(6)}(z)k+9a_9y^{(8)}(z)k+11a_{11}y^{(10)}(z)k+13a_{13}y^{(12)}(z)k+15a_{15}y^{(14)}(z)k+17a_{17}y^{(16)}(z)k+ \\
& 19a_{19}y^{(18)}(z)k+21a_{21}y^{(20)}(z)k+23a_{23}y^{(22)}(z)k+25a_{25}y^{(24)}(z)k+27a_{27}y^{(26)}(z)k+29a_{29}y^{(28)}(z)k+ \\
& 31a_{31}y^{(30)}(z)k-by(z)^3+(a_{32}k^{32}-a_{31}k^{31}-a_{30}k^{30}+a_{29}k^{29}+a_{28}k^{28}-a_{27}k^{27}-a_{26}k^{26}+a_{25}k^{25}+a_{24}k^{24}-a_{23}k^{23}- \\
& a_{22}k^{22}+a_{21}k^{21}+a_{20}k^{20}-a_{19}k^{19}-a_{18}k^{18}+a_{17}k^{17}+a_{16}k^{16}-a_{15}k^{15}-a_{14}k^{14}+a_{13}k^{13}-a_{12}k^{12}+a_{11}k^{11}- \\
& a_{10}k^{10}+a_9k^9-a_8k^8-a_7k^7+a_6k^6+a_5k^5-a_4k^4-a_3k^3-a_2k^2-a_1k)
\end{aligned}$$

$$(a_2 + k(3a_3 + k(k(k(15a_6 + k(21a_7 + k(k(k(45a_{10} + k(55a_{11} + k(k(k(91a_{14} + k(105a_{15} + k(k(k(153a_{18} + k(167a_{20} + k(181a_{22} + k(195a_{24} + k(209a_{26} + k(223a_{28} + k(237a_{30} + k(251a_{32} + k(265a_{34} + k(279a_{36} + k(293a_{38} + k(307a_{40} + k(321a_{42} + k(335a_{44} + k(349a_{46} + k(363a_{48} + k(377a_{50} + k(391a_{52} + k(405a_{54} + k(419a_{56} + k(433a_{58} + k(447a_{60} + k(461a_{62} + k(475a_{64} + k(489a_{66} + k(503a_{68} + k(517a_{70} + k(531a_{72} + k(545a_{74} + k(559a_{76} + k(573a_{78} + k(587a_{80} + k(601a_{82} + k(615a_{84} + k(629a_{86} + k(643a_{88} + k(657a_{90} + k(671a_{92} + k(685a_{94} + k(699a_{96} + k(713a_{98} + k(727a_{100} + k(741a_{102} + k(755a_{104} + k(769a_{106} + k(783a_{108} + k(797a_{110} + k(811a_{112} + k(825a_{114} + k(839a_{116} + k(853a_{118} + k(867a_{120} + k(881a_{122} + k(895a_{124} + k(909a_{126} + k(923a_{128} + k(937a_{130} + k(951a_{132} + k(965a_{134} + k(979a_{136} + k(993a_{138} + k(1007a_{140} + k(1021a_{142} + k(1035a_{144} + k(1049a_{146} + k(1063a_{148} + k(1077a_{150} + k(1091a_{152} + k(1105a_{154} + k(1119a_{156} + k(1133a_{158} + k(1147a_{160} + k(1161a_{162} + k(1175a_{164} + k(1189a_{166} + k(1203a_{168} + k(1217a_{170} + k(1231a_{172} + k(1245a_{174} + k(1259a_{176} + k(1273a_{178} + k(1287a_{180} + k(1301a_{182} + k(1315a_{184} + k(1329a_{186} + k(1343a_{188} + k(1357a_{190} + k(1371a_{192} + k(1385a_{194} + k(1399a_{196} + k(1413a_{198} + k(1427a_{200} + k(1441a_{202} + k(1455a_{204} + k(1469a_{206} + k(1483a_{208} + k(1497a_{210} + k(1511a_{212} + k(1525a_{214} + k(1539a_{216} + k(1553a_{218} + k(1567a_{220} + k(1581a_{222} + k(1595a_{224} + k(1609a_{226} + k(1623a_{228} + k(1637a_{230} + k(1651a_{232} + k(1665a_{234} + k(1679a_{236} + k(1693a_{238} + k(1707a_{240} + k(1721a_{242} + k(1735a_{244} + k(1749a_{246} + k(1763a_{248} + k(1777a_{250} + k(1791a_{252} + k(1805a_{254} + k(1819a_{256} + k(1833a_{258} + k(1847a_{260} + k(1861a_{262} + k(1875a_{264} + k(1889a_{266} + k(1903a_{268} + k(1917a_{270} + k(1931a_{272} + k(1945a_{274} + k(1959a_{276} + k(1973a_{278} + k(1987a_{280} + k(2001a_{282} + k(2015a_{284} + k(2029a_{286} + k(2043a_{288} + k(2057a_{290} + k(2071a_{292} + k(2085a_{294} + k(2099a_{296} + k(2113a_{298} + k(2127a_{300} + k(2141a_{302} + k(2155a_{304} + k(2169a_{306} + k(2183a_{308} + k(2197a_{310} + k(2211a_{312} + k(2225a_{314} + k(2239a_{316} + k(2253a_{318} + k(2267a_{320} + k(2281a_{322} + k(2295a_{324} + k(2309a_{326} + k(2323a_{328} + k(2337a_{330} + k(2351a_{332} + k(2365a_{334} + k(2379a_{336} + k(2393a_{338} + k(2407a_{340} + k(2421a_{342} + k(2435a_{344} + k(2449a_{346} + k(2463a_{348} + k(2477a_{350} + k(2491a_{352} + k(2505a_{354} + k(2519a_{356} + k(2533a_{358} + k(2547a_{360} + k(2561a_{362} + k(2575a_{364} + k(2589a_{366} + k(2603a_{368} + k(2617a_{370} + k(2631a_{372} + k(2645a_{374} + k(2659a_{376} + k(2673a_{378} + k(2687a_{380} + k(2701a_{382} + k(2715a_{384} + k(2729a_{386} + k(2743a_{388} + k(2757a_{390} + k(2771a_{392} + k(2785a_{394} + k(2799a_{396} + k(2813a_{398} + k(2827a_{400} + k(2841a_{402} + k(2855a_{404} + k(2869a_{406} + k(2883a_{408} + k(2897a_{410} + k(2911a_{412} + k(2925a_{414} + k(2939a_{416} + k(2953a_{418} + k(2967a_{420} + k(2981a_{422} + k(2995a_{424} + k(3009a_{426} + k(3023a_{428} + k(3037a_{430} + k(3051a_{432} + k(3065a_{434} + k(3079a_{436} + k(3093a_{438} + k(3107a_{440} + k(3121a_{442} + k(3135a_{444} + k(3149a_{446} + k(3163a_{448} + k(3177a_{450} + k(3191a_{452} + k(3205a_{454} + k(3219a_{456} + k(3233a_{458} + k(3247a_{460} + k(3261a_{462} + k(3275a_{464} + k(3289a_{466} + k(3303a_{468} + k(3317a_{470} + k(3331a_{472} + k(3345a_{474} + k(3359a_{476} + k(3373a_{478} + k(3387a_{480} + k(3401a_{482} + k(3415a_{484} + k(3429a_{486} + k(3443a_{488} + k(3457a_{490} + k(3471a_{492} + k(3485a_{494} + k(3499a_{496} + k(3513a_{498} + k(3527a_{500} + k(3541a_{502} + k(3555a_{504} + k(3569a_{506} + k(3583a_{508} + k(3597a_{510} + k(3611a_{512} + k(3625a_{514} + k(3639a_{516} + k(3653a_{518} + k(3667a_{520} + k(3681a_{522} + k(3695a_{524} + k(3709a_{526} + k(3723a_{528} + k(3737a_{530} + k(3751a_{532} + k(3765a_{534} + k(3779a_{536} + k(3793a_{538} + k(3807a_{540} + k(3821a_{542} + k(3835a_{544} + k(3849a_{546} + k(3863a_{548} + k(3877a_{550} + k(3891a_{552} + k(3905a_{554} + k(3919a_{556} + k(3933a_{558} + k(3947a_{560} + k(3961a_{562} + k(3975a_{564} + k(3989a_{566} + k(4003a_{568} + k(4017a_{570} + k(4031a_{572} + k(4045a_{574} + k(4059a_{576} + k(4073a_{578} + k(4087a_{580} + k(4101a_{582} + k(4115a_{584} + k(4129a_{586} + k(4143a_{588} + k(4157a_{590} + k(4171a_{592} + k(4185a_{594} + k(4199a_{596} + k(4213a_{598} + k(4227a_{600} + k(4241a_{602} + k(4255a_{604} + k(4269a_{606} + k(4283a_{608} + k(4297a_{610} + k(4311a_{612} + k(4325a_{614} + k(4339a_{616} + k(4353a_{618} + k(4367a_{620} + k(4381a_{622} + k(4395a_{624} + k(4409a_{626} + k(4423a_{628} + k(4437a_{630} + k(4451a_{632} + k(4465a_{634} + k(4479a_{636} + k(4493a_{638} + k(4507a_{640} + k(4521a_{642} + k(4535a_{644} + k(4549a_{646} + k(4563a_{648} + k(4577a_{650} + k(4591a_{652} + k(4605a_{654} + k(4619a_{656} + k(4633a_{658} + k(4647a_{660} + k(4661a_{662} + k(4675a_{664} + k(4689a_{666} + k(4703a_{668} + k(4717a_{670} + k(4731a_{672} + k(4745a_{674} + k(4759a_{676} + k(4773a_{678} + k(4787a_{680} + k(4801a_{682} + k(4815a_{684} + k(4829a_{686} + k(4843a_{688} + k(4857a_{690} + k(4871a_{692} + k(4885a_{694} + k(4899a_{696} + k(4913a_{698} + k(4927a_{700} + k(4941a_{702} + k(4955a_{704} + k(4969a_{706} + k(4983a_{708} + k(4997a_{710} + k(5011a_{712} + k(5025a_{714} + k(5039a_{716} + k(5053a_{718} + k(5067a_{720} + k(5081a_{722} + k(5095a_{724} + k(5109a_{726} + k(5123a_{728} + k(5137a_{730} + k(5151a_{732} + k(5165a_{734} + k(5179a_{736} + k(5193a_{738} + k(5207a_{740} + k(5221a_{742} + k(5235a_{744} + k(5249a_{746} + k(5263a_{748} + k(5277a_{750} + k(5291a_{752} + k(5305a_{754} + k(5319a_{756} + k(5333a_{758} + k(5347a_{760} + k(5361a_{762} + k(5375a_{764} + k(5389a_{766} + k(5403a_{768} + k(5417a_{770} + k(5431a_{772} + k(5445a_{774} + k(5459a_{776} + k(5473a_{778} + k(5487a_{780} + k(5501a_{782} + k(5515a_{784} + k(5529a_{786} + k(5543a_{788} + k(5557a_{790} + k(5571a_{792} + k(5585a_{794} + k(5599a_{796} + k(5613a_{798} + k(5627a_{800} + k(5641a_{802} + k(5655a_{804} + k(5669a_{806} + k(5683a_{808} + k(5697a_{810} + k(5711a_{812} + k(5725a_{814} + k(5739a_{816} + k(5753a_{818} + k(5767a_{820} + k(5781a_{822} + k(5795a_{824} + k(5809a_{826} + k(5823a_{828} + k(5837a_{830} + k(5851a_{832} + k(5865a_{834} + k(5879a_{836} + k(5893a_{838} + k(5907a_{840} + k(5921a_{842} + k(5935a_{844} + k(5949a_{846} + k(5963a_{848} + k(5977a_{850} + k(5991a_{852} + k(6005a_{854} + k(6019a_{856} + k(6033a_{858} + k(6047a_{860} + k(6061a_{862} + k(6075a_{864} + k(6089a_{866} + k(6103a_{868} + k(6117a_{870} + k(6131a_{872} + k(6145a_{874} + k(6159a_{876} + k(6173a_{878} + k(6187a_{880} + k(6201a_{882} + k(6215a_{884} + k(6229a_{886} + k(6243a_{888} + k(6257a_{890} + k(6271a_{892} + k(6285a_{894} + k(6299a_{896} + k(6313a_{898} + k(6327a_{900} + k(6341a_{902} + k(6355a_{904} + k(6369a_{906} + k(6383a_{908} + k(6397a_{910} + k(6411a_{912} + k(6425a_{914} + k(6439a_{916} + k(6453a_{918} + k(6467a_{920} + k(6481a_{922} + k(6495a_{924} + k(6509a_{926} + k(6523a_{928} + k(6537a_{930} + k(6551a_{932} + k(6565a_{934} + k(6579a_{936} + k(6593a_{938} + k(6607a_{940} + k(6621a_{942} + k(6635a_{944} + k(6649a_{946} + k(6663a_{948} + k(6677a_{950} + k(6691a_{952} + k(6705a_{954} + k(6719a_{956} + k(6733a_{958} + k(6747a_{960} + k(6761a_{962} + k(6775a_{964} + k(6789a_{966} + k(6803a_{968} + k(6817a_{970} + k(6831a_{972} + k(6845a_{974} + k(6859a_{976} + k(6873a_{978} + k(6887a_{980} + k(6901a_{982} + k(6915a_{984} + k(6929a_{986} + k(6943a_{988} + k(6957a_{990} + k(6971a_{992} + k(6985a_{994} + k(6999a_{996} + k(7013a_{998} + k(7027a_{1000} + k(7041a_{1002} + k(7055a_{1004} + k(7069a_{1006} + k(7083a_{1008} + k(7097a_{1010} + k(7111a_{1012} + k(7125a_{1014} + k(7139a_{1016} + k(7153a_{1018} + k(7167a_{1020} + k(7181a_{1022} + k(7195a_{1024} + k(7209a_{1026} + k(7223a_{1028} + k(7237a_{1030} + k(7251a_{1032} + k(7265a_{1034} + k(7279a_{1036} + k(7293a_{1038} + k(7307a_{1040} + k(7321a_{1042} + k(7335a_{1044} + k(7349a_{1046} + k(7363a_{1048} + k(7377a_{1050} + k(7391a_{1052} + k(7405a_{1054} + k(7419a_{1056} + k(7433a_{1058} + k(7447a_{1060} + k(7461a_{1062} + k(7475a_{1064} + k(7489a_{1066} + k(7503a_{1068} + k(7517a_{1070} + k(7531a_{1072} + k(7545a_{1074} + k(7559a_{1076} + k(7573a_{1078} + k(7587a_{1080} + k(7601a_{1082} + k(7615a_{1084} + k(7629a_{1086} + k(7643a_{1088} + k(7657a_{1090} + k(7671a_{1092} + k(7685a_{1094} + k(7699a_{1096} + k(7713a_{1098} + k(7727a_{1100} + k(7741a_{1102} + k(7755a_{1104} + k(7769a_{1106} + k(7783a_{1108} + k(7797a_{1110} + k(7811a_{1112} + k(7825a_{1114} + k(7839a_{1116} + k(7853a_{1118} + k(7867a_{1120} + k(7881a_{1122} + k(7895a_{1124} + k(7909a_{1126} + k(7923a_{1128} + k(7937a_{1130} + k(7951a_{1132} + k(7965a_{1134} + k(7979a_{1136} + k(7993a_{1138} + k(8007a_{1140} + k(8021a_{1142} + k(8035a_{1144} + k(8049a_{1146} + k(8063a_{1148} + k(8077a_{1150} + k(8091a_{1152} + k(8105a_{1154} + k(8119a_{1156} + k(8133a_{1158} + k(8147a_{1160} + k(8161a_{1162} + k(8175a_{1164} + k(8189a_{1166} + k(8203a_{1168} + k(8217a_{1170} + k(8231a_{1172} + k(8245a_{1174} + k(8259a_{1176} + k(8273a_{1178} + k(8287a_{1180} + k(8301a_{1182} + k(8315a_{1184} + k(8329a_{1186} + k(8343a_{1188} + k(8357a_{1190} + k(8371a_{1192} + k(8385a_{1194} + k(8399a_{1196} + k(8413a_{1198} + k(8427a_{1200} + k(8441a_{1202} + k(8455a_{1204} + k(8469a_{1206} + k(8483a_{1208} + k(8497a_{1210} + k(8511a_{1212} + k(8525a_{1214} + k(8539a_{1216} + k(8553a_{1218} + k(8567a_{1220} + k(8581a_{1222} + k(8595a_{1224} + k(8609a_{1226} + k(8623a_{1228} + k(8637a_{1230} + k(8651a_{1232} + k(8665a_{1234} + k(8679a_{1236} + k(8693a_{1238} + k(8707a_{1240} + k(8721a_{1242} + k(8735a_{1244} + k(8749a_{1246} + k(8763a_{1248} + k(8777a_{1250} + k(8791a_{1252} + k(8805a_{1254} + k(8819a_{1256} + k(8833a_{1258} + k(8847a_{1260} + k(8861a_{1262} + k(8875a_{1264} + k(8889a_{1266} + k(8903a_{1268} + k(8917a_{1270} + k(8931a_{1272} + k(8945a_{1274} + k(8959a_{1276} + k(8973a_{1278} + k(8987a_{1280} + k(9001a_{1282} + k(9015a_{1284} + k(9029a_{1286} + k(9043a_{1288} + k(9057a_{1290} + k(9071a_{1292} + k(9085a_{1294} + k(9099a_{1296} + k(9113a_{1298} + k(9127a_{1300} + k(9141a_{1302} + k(9155a_{1304} + k(9169a_{1306} + k(9183a_{1308} + k(9197a_{1310} + k(9211a_{1312} + k(9225a_{1314} + k(9239a_{1316} + k(9253a_{1318} + k(9267a_{1320} + k(9281a_{1322} + k(9295a_{1324} + k(9309a_{1326} + k(9323a_{1328} + k(9337a_{1330} + k(9351a_{1332} + k(9365a_{1334} + k(9379a_{1336} + k(9393a_{1338} + k(9407a_{1340} + k(9421a_{1342} + k(9435a_{1344} + k(9449a_{1346} + k(9463a_{1348} + k(9477a_{1350} + k(9491a_{1352} + k(9505a_{1354} + k(9519a_{1356} + k(9533a_{1358} + k(9547a_{1360} + k(9561a_{1362} + k(9575a_{1364} + k(9589a_{1366} + k(9603a_{1368} + k(9617a_{1370} + k(9631a_{1372} + k(9645a_{1374} + k(9659a_{1376} + k(9673a_{1378} + k(9687a_{1380} + k(9701a_{1382} + k(9715a_{1384} + k(9729a_{1386} + k(9743a_{1388} + k(9757a_{1390} + k(9771a_{1392} + k(9785a_{1394} + k(9799a_{1396} + k(9813a_{1398} + k(9827a_{1400} + k(9841a_{1402} + k(9855a_{1404} + k(9869a_{1406} + k(9883a_{1408} + k(9897a_{1410} + k(9911a_{1412} + k(9925a_{1414} + k(9939a_{1416} + k(9953a_{1418} + k(9967a_{1420} + k(9981a_{1422} + k(9995a_{1424} + k(10009a_{1426} + k(10023a_{1428} + k(10037a_{1430} + k(10051a_{1432} + k(10065a_{1434} + k(10079a_{1436} + k(10093a_{1438} + k(10107a_{1440} + k(10121a_{1442} + k(10135a_{1444} + k(10149a_{1446} + k(10163a_{1448} + k(10177a_{1450} + k(10191a_{1452} + k(10205a_{1454} + k(10219a_{1456} + k(10233a_{1458} + k(10247a_{1460} + k(10261a_{1462} + k(10275a_{1464} + k(10289a_{1466} + k(10303a_{1468} + k(10317a_{1470} + k(10331a_{1472} + k(10345a_{1474} + k(10359a_{1476} + k(10373a_{1478} + k(10387a_{1480} + k(10401a_{1482} + k(10415a_{1484} + k(10429a_{1486} + k(10443a_{1488} + k(10457a_{1490} + k(10471a_{1492} + k(10485a_{1494} + k(10499a_{1496} + k(10513a_{1498} + k(10527a_{1500} + k(10541a_{1502} + k(10555a_{1504} + k(10569a_{1506} + k(10583a_{1508} + k(10597a_{1510} + k(10611a_{1512} + k(10625a_{1514} + k(10639a_{1516} + k(10653a_{1518} + k(10667a_{1520} + k(10681a_{1522} + k(10695a_{1524} + k(10709a_{1526} + k(10723a_{1528} + k(10737a_{1530} + k(10751a_{1532} + k(10765a_{1534} + k(10779a_{1536} + k(10793a_{1538} + k(10807a_{1540} + k(10821a_{1542} + k(10835a_{1544} + k(10849a_{1546} + k(10863a_{1548} + k(10877a_{1550} + k(10891a_{1552} + k(10905a_{1554} + k(10919a_{1556} + k(10933a_{1558} + k(10947a_{1560} + k(10961a_{1562} + k(10975a_{1564} + k(10989a_{1566} + k(11003a_{1568} + k(11017a_{1570} + k(11031a_{1572} + k(11045a_{1574} + k(11059a_{1576} + k(11073a_{1578} + k(11087a_{1580} + k(11101a_{1582} + k(11115a_{1584} + k(11129a_{1586} + k(11143a_{1588} + k(11157a_{1590} + k(11171a_{1592} + k(11185a_{1594} + k(11199a_{1596} + k(11213a_{1598} + k(11227a_{1600} + k(11241a_{1602} + k(11255a_{1604} + k(11269a_{1606} + k(11283a_{1608} + k(11297a_{1610} + k(11311a_{1612} + k(11325a_{1614} + k(11339a_{1616} + k(11353a_{1618} + k(11367a_{1620} + k(11381a_{1622} + k(11395a_{1624} + k(11409a_{1626} + k(11423a_{1628} + k(11437a_{1630} + k(11451a_{1632} + k(11465a_{1634} + k(11479a_{1636} + k(11493a_{1638} + k(11507a_{1640} + k(11521a_{1642} + k(11535a_{1644} + k(11549a_{1646} + k(11563a_{1648} + k(11577a_{1650} + k(11591a_{1652} + k(11605a_{1654} + k(11619a_{1656} + k(11633a_{1658} + k(11647a_{1660} + k(11661a_{1662} + k(11675a_{1664} + k(11689a_{1666} + k(11703a_{1668} + k(11717a_{1670} + k(11731a_{1672} + k(11745a_{1674} + k(11759a_{1676} + k(11773a_{1678} + k(11787a_{1680} + k(11801a_{1682} + k(11815a_{1684} + k(11829a_{1686} + k(11843a_{1688} + k(11857a_{1690} + k(11871a_{1692} + k(11885a_{1694} + k(11899a_{1696} + k(11913a_{1698} + k(11927a_{1700} + k(11941a_{1702} + k(11955a_{1704} + k(11969a_{1706} + k(11983a_{1708} + k(12007a_{1710} + k(12021a_{1712} + k(12035a_{1714} + k(12049a_{1716} + k(12063a_{1718} + k(12077a_{1720} + k(12091a_{1722} + k(12105a_{1724} + k(12119a_{1726} + k(12133a_{1728} + k(12147a_{1730} + k(12161a_{1732} + k(12175a_{1734} + k(12189a_{1736} + k(12203a_{1738} + k(12217a_{1740} + k(12231a_{1742} + k(12245a_{1744} + k(12259a_{1746} + k(12273a_{1748} + k(12287a_{1750} + k(12301a_{1752} + k(12315a_{1754} + k(12329a_{1756} + k(12343a_{1758} + k(12357a_{1760} + k(12371a_{1762} + k(12385a_{1764} + k(12399a_{1766} + k(12413a_{1768} + k(12427a_{1770} + k(12441a_{1772} + k(12455a_{1774} + k(12469a_{1776} + k(12483a_{1778} + k(12497a_{1780} + k(12511a_{1782} + k(12525a_{1784} + k(12539a_{1786} + k(12553a_{1788} + k(12567a_{1790} + k(12581a_{1792} + k(12595a_{1794} + k(12609a_{1796} + k(12623a_{1798} + k(12637a_{1800} + k(12651a_{1802} + k(12665a_{1804} + k(12679a_{1806} + k(12693a_{1808} + k(12707a_{1810} + k(12721a_{1812} + k(12735a_{1814} + k(12749a_{1816} + k(12763a_{1818} + k(12777a_{1820} + k(12791a_{1822} + k(12805a_{1824} + k(12819a_{1$$

$$4a_4k + 40a_6k^3 + 896a_8k^5$$

$$\begin{aligned} C0 \rightarrow & a_1 - 79360a_{10}k^9 - 4245504a_{12}k^{11} - 313155584a_{14}k^{13} - 30460116992a_{16}k^{15} - 3777576173568a_{18}k^{17} - \\ & 2a_2k - 581777702256640a_{20}k^{19} - 108932957168730112a_{22}k^{21} - 24370173276164456448a_{24}k^{23} - \\ & 6419958484945407574016a_{26}k^{25} - 1967044844910430876860416a_{28}k^{27} - 693575525634287935244206080a_{30}k^{29} - \\ & 278846808228005417477465964544a_{32}k^{31} - 8a_4k^3 - 96a_6k^5 - 2176a_8k^7 \end{aligned}$$

Constraints on coefficients from real part of equation:

$$b \rightarrow \frac{197773427268988253689594652323728945315840000000a_{32}\chi^{16}}{A^2}$$

$$a_{30} \rightarrow -496a_{32}k^2 - 16736a_{32}$$

$$a_{28} \rightarrow 35960a_{32}k^4 + 7280160a_{32}k^2 + 128634304a_{32}$$

$$a_{26} \rightarrow -906192a_{32}k^6 - 458650080a_{32}k^4 - 48623766912a_{32}k^2 - 602294674944a_{32}$$

$$\begin{aligned} a_{24} \rightarrow & 10518300a_{32}k^8 + 9937418400a_{32}k^6 + 2633787374400a_{32}k^4 + 195745769356800a_{32}k^2 + \\ & 1921399034979840a_{32} \end{aligned}$$

$$\begin{aligned} a_{22} \rightarrow & -64512240a_{32}k^{10} - 97954552800a_{32}k^8 - 48461687688960a_{32}k^6 - 9004305390412800a_{32}k^4 - \\ & 530306133654435840a_{32}k^2 - 4424871564282224640a_{32} \end{aligned}$$

$$\begin{aligned} a_{20} \rightarrow & 225792840a_{32}k^{12} + 502833371040a_{32}k^{10} + 399808923433920a_{32}k^8 + 138666303012357120a_{32}k^6 + \\ & 20416786145695779840a_{32}k^4 + 1022145331349193891840a_{32}k^2 + 7603550585159681556480a_{32} \end{aligned}$$

$$\begin{aligned} a_{18} \rightarrow & -471435600a_{32}k^{14} - 1447550613600a_{32}k^{12} - 1688082121165440a_{32}k^{10} - 940949913298137600a_{32}k^8 - \\ & 258612624512146544640a_{32}k^6 - 32367935492724473241600a_{32}k^4 - 1444674611180339495731200a_{32}k^2 - \\ & 9936653556286701091553280a_{32} \end{aligned}$$

$$\begin{aligned} a_{16} \rightarrow & 601080390a_{32}k^{16} + 2433793888800a_{32}k^{14} + 3913281280883520a_{32}k^{12} + 3199229705213667840a_{32}k^{10} + \\ & 1413133269655657904640a_{32}k^8 + 330152942025789627064320a_{32}k^6 + 36839202585098657141145600a_{32}k^4 + \\ & 1520307994111865267007651840a_{32}k^2 + 9972324216558579096070717440a_{32} \end{aligned}$$

$$\begin{aligned} a_{14} \rightarrow & -471435600a_{32}k^{18} - 2433793888800a_{32}k^{16} - 5160370919846400a_{32}k^{14} - 5816781282206668800a_{32}k^{12} - \\ & 3768355385748421079040a_{32}k^{10} - 1414941180110526973132800a_{32}k^8 - 294713620680789257129164800a_{32}k^6 - \\ & 30406159882237305340153036800a_{32}k^4 - 1196678905987029491528486092800a_{32}k^2 - 77046777836001575036 \end{aligned}$$

$$\begin{aligned} a_{12} \rightarrow & 225792840a_{32}k^{20} + 1447550613600a_{32}k^{18} + 3913281280883520a_{32}k^{16} + 5816781282206668800a_{32}k^{14} + \\ & 5195762728834944215040a_{32}k^{12} + 2861325497556843434557440a_{32}k^{10} + 957819267212565085669785600a_{32}k^8 - \\ & 184464036618906319063595089920a_{32}k^6 + 18149630074136613954848705740800a_{32}k^4 + 701125678307614332 \end{aligned}$$

$$4563377558393193884147341479378944a_{32}$$

$$\begin{aligned} a_{10} \rightarrow & -64512240a_{32}k^{22} - 502833371040a_{32}k^{20} - 1688082121165440a_{32}k^{18} - 3199229705213667840a_{32}k^{16} - \\ & 3768355385748421079040a_{32}k^{14} - 2861325497556843434557440a_{32}k^{12} - 1404801591911762125649018880a_{32}k^{10} - \\ & 434808086315993466364188426240a_{32}k^8 - 79858372326201101401334305259520a_{32}k^6 - 771238246138375766 \end{aligned}$$

$$301182918853950796353724537639010304a_{32}k^2 - 2048384260430248191176830059789942784a_{32}$$

$$a_8 \rightarrow 10518300a_{32}k^{24} + 97954552800a_{32}k^{22} + 399808923433920a_{32}k^{20} + 940949913298137600a_{32}k^{18} +$$

$$\begin{aligned}
& 1413133269655657904640a_{32}k^{16} + 1414941180110526973132800a_{32}k^{14} + 957819267212565085669785600a_{32}k^{12} \\
& 434808086315993466364188426240a_{32}k^{10} + 128343812667108912966430133452800a_{32}k^8 + 2313714738415127200a_{32}k^6 \\
& 2258871891404630972652934032292577280a_{32}k^4 + 92177291719361168602957352690547425280a_{32}k^2 + 682501293003707540548575337555968393216a_{32} \\
& a_6 \rightarrow -906192a_{32}k^{26} - 9937418400a_{32}k^{24} - 48461687688960a_{32}k^{22} - 138666303012357120a_{32}k^{20} - \\
& 258612624512146544640a_{32}k^{18} - 330152942025789627064320a_{32}k^{16} - 294713620680789257129164800a_{32}k^{14} - \\
& 184464036618906319063595089920a_{32}k^{12} - 79858372326201101401334305259520a_{32}k^{10} - 2313714738415127200a_{32}k^8 \\
& 4216560863955311148952143526946144256a_{32}k^6 - 430160694690352120147134312555887984640a_{32}k^4 - 19110036204103811135360109451567115010048a_{32}k^2 - 163027929226904808604955718274763011915776a_{32} \\
& a_4 \rightarrow 35960a_{32}k^{28} + 458650080a_{32}k^{26} + 2633787374400a_{32}k^{24} + 9004305390412800a_{32}k^{22} + 20416786145695779200a_{32}k^{20} \\
& 32367935492724473241600a_{32}k^{18} + 36839202585098657141145600a_{32}k^{16} + 30406159882237305340153036800a_{32}k^{14} \\
& 18149630074136613954848705740800a_{32}k^{12} + 7712382461383757661172642705571840a_{32}k^{10} + 22588718914046400a_{32}k^8 \\
& 430160694690352120147134312555887984640a_{32}k^6 + 47775090510259527838400273628917787525120a_{32}k^4 + 2445418938403572129074335774121445178736640a_{32}k^2 + 2630500290307430441793258994607068324823040 \\
& a_2 \rightarrow -496a_{32}k^{30} - 7280160a_{32}k^{28} - 48623766912a_{32}k^{26} - 195745769356800a_{32}k^{24} - 530306133654435840a_{32}k^{22} - 1022145331349193891840a_{32}k^{20} \\
& - 1444674611180339495731200a_{32}k^{18} - 1520307994111865267007651840a_{32}k^{16} - 1196678905987029491528486092800a_{32}k^{14} - 701125678307614332833876609597440a_{32}k^{12} \\
& - 301182918853950400a_{32}k^{10} - 92177291719361168602957352690547425280a_{32}k^8 - 19110036204103811135360109451567115010048a_{32}k^6 - 163027929226904808604955718274763011915776a_{32}k^4 \\
& 2445418938403572129074335774121445178736640a_{32}k^2 - 15783001741844582650759553967642409948938240a_{32} \\
& 2559228513232002163991166050097792748093440000a_{32} \\
& \omega \rightarrow -a_1k - 31a_{32}k^{32} - 485344a_{32}k^{30} - 3473126208a_{32}k^{28} - 15057366873600a_{32}k^{26} - 44192177804536320a_{32}k^{24} - 92922302849926717440a_{32}k^{22} \\
& - 144467461118033949573120a_{32}k^{20} - 168923110456873918556405760a_{32}k^{18} - 149584863248378686441060761600a_{32}k^{16} - 100160811186802047547696658513920a_{32}k^{14} \\
& - 5019715314232513920a_{32}k^{12} - 18435458343872233720591470538109485056a_{32}k^{10} - 4777509051025952783840027362891778752512a_{32}k^8 - 19110036204103811135360109451567115010048a_{32}k^6 \\
& - 163027929226904808604955718274763011915776a_{32}k^4 - 2445418938403572129074335774121445178736640a_{32}k^2 + 1130023942548747395225110346209651599605a_{32} \\
& 2559228513232002163991166050097792748093440000a_{32}k^2 + 1130023942548747395225110346209651599605a_{32}
\end{aligned}$$

y(z) - function:

$$\frac{4294967296a^{16}A}{(4a^2e^z + \chi e^{-z})^{16}}$$

u(x, t) - function:

$$\frac{4294967296a^{16}Ae^{i(kx-\omega t)}}{(4a^2e^{C_0t+x} + \chi e^{-C_0t-x})^{16}}$$