

Problem. Solve

$$571130 = -687x_0^5 - 329x_1^5 + 99x_2^9 - 654x_3^4 + 242x_4^{10} - 310x_5^3 - 288x_6^7 - 647x_7^5 + 818x_8^{10} + 803x_9^5 + 209x_{10}^4 - 822x_{11}^7 + 639x_{12}^5 + 512x_{13}^4 + 803x_{14}^5 - 231x_{15}^2 - 934x_{16}^8 + 764x_{17}^3 - 145x_{18}^7 + 731x_{19}^8 + 714x_{20}^9 + 256x_{21}^4 + 78x_{22}^3 - 753x_{23}^2 - 543x_{24}^7 + 336x_{25}^5 - 116x_{26}^2 - 925x_{27}^9 - 208x_{28}^3 - 542x_{29}^7 - 312x_{30}^{10} - 30x_{31}^7 + 966x_{32}^4 - 727x_{33}^8 - 140x_{34}^3 - 875x_{35}^6 - 50x_{36}^9 + -399x_{37}^4 + 292x_{38}^7 - 905x_{39}^7 + 485x_{40}^8 - 499x_{41}^4 - 29x_{42}^4 + 816x_{43}^3 - 514x_{44}^5 + 536x_{45}^7 + 118x_{46}^8 + 379x_{47}^8 - 1018x_{48}^8 - 776x_{49}^8 + -1015x_{50}^6 + 664x_{51}^6 + 693x_{52}^4 - 393x_{53}^9 + 183x_{54}^5 - 797x_{55}^8 + 621x_{56}^8 - 168x_{57}^8 - 451x_{58}^6 - 518x_{59}^3 - 13x_{60}^3 + 42x_{61}^7 + -933x_{62}^6 + 316x_{63}^9 - 784x_{64}^7 + 693x_{65}^4 - 601x_{66}^7 + 430x_{67}^5 - 908x_{68}^4 + 724x_{69}^8 + 720x_{70}^{10} + 559x_{71}^5 + 510x_{72}^6 + 465x_{73}^9 + 463x_{74}^7 + -410x_{75}^4 - 630x_{76}^4 - 397x_{77}^8 - 631x_{78}^{10} - 1024x_{79}^6 - 829x_{80}^6 - 968x_{81}^9 + 247x_{82}^{10} - 772x_{83}^5 - 17x_{84}^9 + 509x_{85}^6 + 336x_{86}^5 + 965x_{87}^4 + 182x_{88}^9 + 316x_{89}^9 - 145x_{90}^7 - 438x_{91}^7 - 780x_{92}^{10} + 264x_{93}^3 - 132x_{94}^2 + 367x_{95}^9 + 895x_{96}^9 + 457x_{97}^{10} - 15x_{98}^2 + 340x_{99}^8$$

Solution. Partial

- $-571130 = -(1024) - (895) + (132 * 92^2) - (1018) - (797) - (1015) + (780 * 2^{10}) + (15 * 245^2) - (367 * 2^9) - (875) - (764 * 2^3) + (803 * 3^5) - (731) - (727) - (340 * 2^8) - (654 * 5^4) - (720) + (818) + (438 * 2^7) - (457 * 2^{10}) - (968) - (965 * 2^4) - (822) - (316) - (714) - (310 * 10^3) - (329 * 3^5) + (209 * 4^4) - (925 * 2^9) - (934) - (753 * 29^2) - (803) - (288 * 3^7) + (99) + (145 * 2^7) - (687 * 3^5) - (784) + (242 * 2^{10}) - (908) - (905) - (264 * 12^3) - (647 * 2^5) - (772)$
- https://github.com/maxtuno/SAT_EQUATION/blob/master/diophantine/big_diophantine_equations.txt

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