


> # $Pa + Pb + Pc = 2 \cdot N - 1$ by $H \cdot E$

> $cn := 0$: for n from 1 to 3^4 do $cn := 0$:for a from 2 to 30 do $Pa := \text{ithprime}(a)$:for b
from $a + 1$ to 30 do $Pb := \text{ithprime}(b)$:for c from $b + 1$ to 30 do $Pc := \text{ithprime}(c)$:if 2
 $\cdot n - 1 = Pa + Pb + Pc$ then $cn := cn + 1$: $Ps \parallel cn := [Pa, Pb, Pc]$:fi:od:od:od:if cn
 ≥ 1 then print($N(2 \cdot n - 1)[(\{2\}\{n\} - 1)] = (Ps \parallel 1)[1][\circ.] + (Ps \parallel 1)[2][\circ.]$
 $+ (Ps \parallel 1)[3][\circ.]$) fi:od:

$$\begin{aligned} N(15)_{\{2\}\{8\} - 1} &= 3. + 5. + 7. \\ N(19)_{\{2\}\{10\} - 1} &= 3. + 5. + 11. \\ N(21)_{\{2\}\{11\} - 1} &= 3. + 5. + 13. \\ N(23)_{\{2\}\{12\} - 1} &= 3. + 7. + 13. \\ N(25)_{\{2\}\{13\} - 1} &= 3. + 5. + 17. \\ N(27)_{\{2\}\{14\} - 1} &= 3. + 5. + 19. \\ N(29)_{\{2\}\{15\} - 1} &= 3. + 7. + 19. \\ N(31)_{\{2\}\{16\} - 1} &= 3. + 5. + 23. \\ N(33)_{\{2\}\{17\} - 1} &= 3. + 7. + 23. \\ N(35)_{\{2\}\{18\} - 1} &= 3. + 13. + 19. \\ N(37)_{\{2\}\{19\} - 1} &= 3. + 5. + 29. \\ N(39)_{\{2\}\{20\} - 1} &= 3. + 5. + 31. \\ N(41)_{\{2\}\{21\} - 1} &= 3. + 7. + 31. \\ N(43)_{\{2\}\{22\} - 1} &= 3. + 11. + 29. \\ N(45)_{\{2\}\{23\} - 1} &= 3. + 5. + 37. \\ N(47)_{\{2\}\{24\} - 1} &= 3. + 7. + 37. \\ N(49)_{\{2\}\{25\} - 1} &= 3. + 5. + 41. \\ N(51)_{\{2\}\{26\} - 1} &= 3. + 5. + 43. \\ N(53)_{\{2\}\{27\} - 1} &= 3. + 7. + 43. \\ N(55)_{\{2\}\{28\} - 1} &= 3. + 5. + 47. \\ N(57)_{\{2\}\{29\} - 1} &= 3. + 7. + 47. \\ N(59)_{\{2\}\{30\} - 1} &= 3. + 13. + 43. \\ N(61)_{\{2\}\{31\} - 1} &= 3. + 5. + 53. \\ N(63)_{\{2\}\{32\} - 1} &= 3. + 7. + 53. \\ N(65)_{\{2\}\{33\} - 1} &= 3. + 19. + 43. \\ N(67)_{\{2\}\{34\} - 1} &= 3. + 5. + 59. \\ N(69)_{\{2\}\{35\} - 1} &= 3. + 5. + 61. \\ N(71)_{\{2\}\{36\} - 1} &= 3. + 7. + 61. \\ N(73)_{\{2\}\{37\} - 1} &= 3. + 11. + 59. \\ N(75)_{\{2\}\{38\} - 1} &= 3. + 5. + 67. \\ N(77)_{\{2\}\{39\} - 1} &= 3. + 7. + 67. \\ N(79)_{\{2\}\{40\} - 1} &= 3. + 5. + 71. \end{aligned}$$

$$\begin{aligned}
N(81)_{\{2\} \{41\} -1} &= 3 + 5 + 73 \\
N(83)_{\{2\} \{42\} -1} &= 3 + 7 + 73 \\
N(85)_{\{2\} \{43\} -1} &= 3 + 11 + 71 \\
N(87)_{\{2\} \{44\} -1} &= 3 + 5 + 79 \\
N(89)_{\{2\} \{45\} -1} &= 3 + 7 + 79 \\
N(91)_{\{2\} \{46\} -1} &= 3 + 5 + 83 \\
N(93)_{\{2\} \{47\} -1} &= 3 + 7 + 83 \\
N(95)_{\{2\} \{48\} -1} &= 3 + 13 + 79 \\
N(97)_{\{2\} \{49\} -1} &= 3 + 5 + 89 \\
N(99)_{\{2\} \{50\} -1} &= 3 + 7 + 89 \\
N(101)_{\{2\} \{51\} -1} &= 3 + 19 + 79 \\
N(103)_{\{2\} \{52\} -1} &= 3 + 11 + 89 \\
N(105)_{\{2\} \{53\} -1} &= 3 + 5 + 97 \\
N(107)_{\{2\} \{54\} -1} &= 3 + 7 + 97 \\
N(109)_{\{2\} \{55\} -1} &= 3 + 5 + 101 \\
N(111)_{\{2\} \{56\} -1} &= 3 + 5 + 103 \\
N(113)_{\{2\} \{57\} -1} &= 3 + 7 + 103 \\
N(115)_{\{2\} \{58\} -1} &= 3 + 5 + 107 \\
N(117)_{\{2\} \{59\} -1} &= 3 + 5 + 109 \\
N(119)_{\{2\} \{60\} -1} &= 3 + 7 + 109 \\
N(121)_{\{2\} \{61\} -1} &= 3 + 5 + 113 \\
N(123)_{\{2\} \{62\} -1} &= 3 + 7 + 113 \\
N(125)_{\{2\} \{63\} -1} &= 3 + 13 + 109 \\
N(127)_{\{2\} \{64\} -1} &= 3 + 11 + 113 \\
N(129)_{\{2\} \{65\} -1} &= 3 + 13 + 113 \\
N(131)_{\{2\} \{66\} -1} &= 3 + 19 + 109 \\
N(133)_{\{2\} \{67\} -1} &= 3 + 17 + 113 \\
N(135)_{\{2\} \{68\} -1} &= 3 + 19 + 113 \\
N(137)_{\{2\} \{69\} -1} &= 3 + 31 + 103 \\
N(139)_{\{2\} \{70\} -1} &= 3 + 23 + 113 \\
N(141)_{\{2\} \{71\} -1} &= 3 + 29 + 109 \\
N(143)_{\{2\} \{72\} -1} &= 3 + 31 + 109 \\
N(145)_{\{2\} \{73\} -1} &= 3 + 29 + 113 \\
N(147)_{\{2\} \{74\} -1} &= 3 + 31 + 113 \\
N(149)_{\{2\} \{75\} -1} &= 3 + 37 + 109 \\
N(151)_{\{2\} \{76\} -1} &= 3 + 41 + 107
\end{aligned}$$


$$N(153)_{\{2\} \{77\} -1} = 3 \circ + 37 \circ + 113 \circ$$

$$N(155)_{\{2\} \{78\} -1} = 3 \circ + 43 \circ + 109 \circ$$

$$N(157)_{\{2\} \{79\} -1} = 3 \circ + 41 \circ + 113 \circ$$

$$N(159)_{\{2\} \{80\} -1} = 3 \circ + 43 \circ + 113 \circ$$

$$N(161)_{\{2\} \{81\} -1} = 3 \circ + 61 \circ + 97 \circ$$

(1)