

> # $p1 + p2 + p3 = \text{prime}^2$ by $H \cdot E$ '20 - 11 - 1 :

> $c := 0$:for h from 1 to 10000 do for e from 1 to 100 do if $\text{ithprime}(h) + \text{ithprime}(h + 1) + \text{ithprime}(h + 2) = \text{ithprime}(e)^2$ then $c := c + 1$:print($\text{ithprime}(h)$ [$\{h\}$ thp]
+ $\text{ithprime}(h + 1)$ [$\{h + 1\}$ ithp] + $\text{ithprime}(h + 2)$ [$\{h + 2\}$ thp]
= [$\text{ithprime}(e)$ [$\{e\}$ thp]] [$\text{Prime}[H \cdot E](c)$]²) fi:od:od:

$$13_{\{6\} \text{ thp}} + 17_{\{7\} \text{ ithp}} + 19_{\{8\} \text{ thp}} = [7_{\{4\} \text{ thp}}]_{\text{Prime}_{H \cdot E}}^2 (1)$$

$$37_{\{12\} \text{ thp}} + 41_{\{13\} \text{ ithp}} + 43_{\{14\} \text{ thp}} = [11_{\{5\} \text{ thp}}]_{\text{Prime}_{H \cdot E}}^2 (2)$$

$$277_{\{59\} \text{ thp}} + 281_{\{60\} \text{ ithp}} + 283_{\{61\} \text{ thp}} = [29_{\{10\} \text{ thp}}]_{\text{Prime}_{H \cdot E}}^2 (3)$$

$$313_{\{65\} \text{ thp}} + 317_{\{66\} \text{ ithp}} + 331_{\{67\} \text{ thp}} = [31_{\{11\} \text{ thp}}]_{\text{Prime}_{H \cdot E}}^2 (4)$$

$$613_{\{112\} \text{ thp}} + 617_{\{113\} \text{ ithp}} + 619_{\{114\} \text{ thp}} = [43_{\{14\} \text{ thp}}]_{\text{Prime}_{H \cdot E}}^2 (5)$$

$$7591_{\{965\} \text{ thp}} + 7603_{\{966\} \text{ ithp}} + 7607_{\{967\} \text{ thp}} = [151_{\{36\} \text{ thp}}]_{\text{Prime}_{H \cdot E}}^2 (6)$$

$$8209_{\{1029\} \text{ thp}} + 8219_{\{1030\} \text{ ithp}} + 8221_{\{1031\} \text{ thp}} = [157_{\{37\} \text{ thp}}]_{\text{Prime}_{H \cdot E}}^2 (7)$$

$$12157_{\{1455\} \text{ thp}} + 12161_{\{1456\} \text{ ithp}} + 12163_{\{1457\} \text{ thp}} = [191_{\{43\} \text{ thp}}]_{\text{Prime}_{H \cdot E}}^2 (8)$$

$$23053_{\{2573\} \text{ thp}} + 23057_{\{2574\} \text{ ithp}} + 23059_{\{2575\} \text{ thp}} = [263_{\{56\} \text{ thp}}]_{\text{Prime}_{H \cdot E}}^2 (9)$$

$$32233_{\{3457\} \text{ thp}} + 32237_{\{3458\} \text{ ithp}} + 32251_{\{3459\} \text{ thp}} = [311_{\{64\} \text{ thp}}]_{\text{Prime}_{H \cdot E}}^2 (10)$$

$$42953_{\{4490\} \text{ thp}} + 42961_{\{4491\} \text{ ithp}} + 42967_{\{4492\} \text{ thp}} = [359_{\{72\} \text{ thp}}]_{\text{Prime}_{H \cdot E}}^2 (11)$$

$$44887_{\{4664\} \text{ thp}} + 44893_{\{4665\} \text{ ithp}} + 44909_{\{4666\} \text{ thp}} = [367_{\{73\} \text{ thp}}]_{\text{Prime}_{H \cdot E}}^2 (12)$$

(1)