

> # $X^3 = y^2 + z^2$, $x^3 = y^3 + z^3 + w^3$ by H·E 2019 – 11 – 15 :

> $c := 0$: for x from 1 to 100 do for y from 1 to 1000 do for z from y to 1000 do if $x^3 = y^2 + z^2$ then $c := c + 1$: print($[x[.]^3 = y[.]^2 + z[.]^2][H \cdot E[No = c]]$) fi:od:od:od:

$$[2^3 = 2^2 + 2^2]_{H \cdot E_{No=1}}$$

$$[5^3 = 2^2 + 11^2]_{H \cdot E_{No=2}}$$

$$[5^3 = 5^2 + 10^2]_{H \cdot E_{No=3}}$$

$$[8^3 = 16^2 + 16^2]_{H \cdot E_{No=4}}$$

$$[10^3 = 10^2 + 30^2]_{H \cdot E_{No=5}}$$

$$[10^3 = 18^2 + 26^2]_{H \cdot E_{No=6}}$$

$$[13^3 = 9^2 + 46^2]_{H \cdot E_{No=7}}$$

$$[13^3 = 26^2 + 39^2]_{H \cdot E_{No=8}}$$

$$[17^3 = 17^2 + 68^2]_{H \cdot E_{No=9}}$$

$$[17^3 = 47^2 + 52^2]_{H \cdot E_{No=10}}$$

$$[18^3 = 54^2 + 54^2]_{H \cdot E_{No=11}}$$

$$[20^3 = 16^2 + 88^2]_{H \cdot E_{No=12}}$$

$$[20^3 = 40^2 + 80^2]_{H \cdot E_{No=13}}$$

$$[25^3 = 35^2 + 120^2]_{H \cdot E_{No=14}}$$

$$[25^3 = 44^2 + 117^2]_{H \cdot E_{No=15}}$$

$$[25^3 = 75^2 + 100^2]_{H \cdot E_{No=16}}$$

$$[26^3 = 26^2 + 130^2]_{H \cdot E_{No=17}}$$

$$[26^3 = 74^2 + 110^2]_{H \cdot E_{No=18}}$$

$$[29^3 = 58^2 + 145^2]_{H \cdot E_{No=19}}$$

$$[29^3 = 65^2 + 142^2]_{H \cdot E_{No=20}}$$

$$[32^3 = 128^2 + 128^2]_{H \cdot E_{No=21}}$$

$$[34^3 = 10^2 + 198^2]_{H \cdot E_{No=22}}$$

$$[34^3 = 102^2 + 170^2]_{H \cdot E_{No=23}}$$

$$[37^3 = 37^2 + 222^2]_{H \cdot E_{No=24}}$$

$$[37^3 = 107^2 + 198^2]_{H \cdot E_{No=25}}$$

$$[40^3 = 80^2 + 240^2]_{H \cdot E_{No=26}}$$

$$[40^3 = 144^2 + 208^2]_{H \cdot E_{No=27}}$$

$$[41^3 = 115^2 + 236^2]_{H \cdot E_{No=28}}$$

$$[41^3 = 164^2 + 205^2]_{H \cdot E_{No=29}}$$

$$[45^3 = 54^2 + 297^2]_{H \cdot E_{No=30}}$$

$$[45^3 = 135^2 + 270^2]_{H \cdot E_{No=31}}$$

$$[50^3 = 50^2 + 350^2]_{H \cdot E_{No=32}}$$

$$[50^3 = 146^2 + 322^2]_{H \cdot E_{No=33}}$$

$$[50^3 = 170^2 + 310^2]_{H \cdot E_{No=34}}$$

$$[50^3 = 250^2 + 250^2]_{H \cdot E_{No=35}}$$

$$[52^3 = 72^2 + 368^2]_{H \cdot E_{No=36}}$$

$$[52^3 = 208^2 + 312^2]_{H \cdot E_{No=37}}$$

$$[53^3 = 106^2 + 371^2]_{H \cdot E_{No=38}}$$

$$[53^3 = 259^2 + 286^2]_{H \cdot E_{No=39}}$$

$$[58^3 = 154^2 + 414^2]_{H \cdot E_{No=40}}$$

$$[58^3 = 174^2 + 406^2]_{H \cdot E_{No=41}}$$

$$[61^3 = 234^2 + 415^2]_{H \cdot E_{No=42}}$$

$$[61^3 = 305^2 + 366^2]_{H \cdot E_{No=43}}$$

$$[65^3 = 7^2 + 524^2]_{H \cdot E_{No=44}}$$

$$[65^{\circ}_3 = 65^{\circ}_2 + 520^{\circ}_2]_{H \cdot E_{No=45}}$$

$$[65^{\circ}_3 = 140^{\circ}_2 + 505^{\circ}_2]_{H \cdot E_{No=46}}$$

$$[65^{\circ}_3 = 191^{\circ}_2 + 488^{\circ}_2]_{H \cdot E_{No=47}}$$

$$[65^{\circ}_3 = 208^{\circ}_2 + 481^{\circ}_2]_{H \cdot E_{No=48}}$$

$$[65^{\circ}_3 = 260^{\circ}_2 + 455^{\circ}_2]_{H \cdot E_{No=49}}$$

$$[65^{\circ}_3 = 320^{\circ}_2 + 415^{\circ}_2]_{H \cdot E_{No=50}}$$

$$[65^{\circ}_3 = 364^{\circ}_2 + 377^{\circ}_2]_{H \cdot E_{No=51}}$$

$$[68^{\circ}_3 = 136^{\circ}_2 + 544^{\circ}_2]_{H \cdot E_{No=52}}$$

$$[68^{\circ}_3 = 376^{\circ}_2 + 416^{\circ}_2]_{H \cdot E_{No=53}}$$

$$[72^{\circ}_3 = 432^{\circ}_2 + 432^{\circ}_2]_{H \cdot E_{No=54}}$$

$$[73^{\circ}_3 = 219^{\circ}_2 + 584^{\circ}_2]_{H \cdot E_{No=55}}$$

$$[73^{\circ}_3 = 296^{\circ}_2 + 549^{\circ}_2]_{H \cdot E_{No=56}}$$

$$[74^{\circ}_3 = 182^{\circ}_2 + 610^{\circ}_2]_{H \cdot E_{No=57}}$$

$$[74^{\circ}_3 = 370^{\circ}_2 + 518^{\circ}_2]_{H \cdot E_{No=58}}$$

$$[80^{\circ}_3 = 128^{\circ}_2 + 704^{\circ}_2]_{H \cdot E_{No=59}}$$

$$[80^{\circ}_3 = 320^{\circ}_2 + 640^{\circ}_2]_{H \cdot E_{No=60}}$$

$$[82^{\circ}_3 = 82^{\circ}_2 + 738^{\circ}_2]_{H \cdot E_{No=61}}$$

$$[82^{\circ}_3 = 242^{\circ}_2 + 702^{\circ}_2]_{H \cdot E_{No=62}}$$

$$[85^{\circ}_3 = 51^{\circ}_2 + 782^{\circ}_2]_{H \cdot E_{No=63}}$$

$$[85^{\circ}_3 = 170^{\circ}_2 + 765^{\circ}_2]_{H \cdot E_{No=64}}$$

$$[85^{\circ}_3 = 210^{\circ}_2 + 755^{\circ}_2]_{H \cdot E_{No=65}}$$

$$[85^{\circ}_3 = 285^{\circ}_2 + 730^{\circ}_2]_{H \cdot E_{No=66}}$$

$$[85^{\circ}_3 = 323^{\circ}_2 + 714^{\circ}_2]_{H \cdot E_{No=67}}$$

$$[85^3 = 413^2 + 666^2]_{H \cdot E_{No=68}}$$

$$[85^3 = 478^2 + 621^2]_{H \cdot E_{No=69}}$$

$$[85^3 = 510^2 + 595^2]_{H \cdot E_{No=70}}$$

$$[89^3 = 88^2 + 835^2]_{H \cdot E_{No=71}}$$

$$[89^3 = 445^2 + 712^2]_{H \cdot E_{No=72}}$$

$$[90^3 = 270^2 + 810^2]_{H \cdot E_{No=73}}$$

$$[90^3 = 486^2 + 702^2]_{H \cdot E_{No=74}}$$

$$[97^3 = 297^2 + 908^2]_{H \cdot E_{No=75}}$$

$$[97^3 = 388^2 + 873^2]_{H \cdot E_{No=76}}$$

$$[98^3 = 686^2 + 686^2]_{H \cdot E_{No=77}}$$

$$[100^3 = 280^2 + 960^2]_{H \cdot E_{No=78}}$$

$$[100^3 = 352^2 + 936^2]_{H \cdot E_{No=79}}$$

$$[100^3 = 600^2 + 800^2]_{H \cdot E_{No=80}}$$

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> $c := 0$: for x from 1 to 100 do for y from 1 to 100 do for z from y to 100 do for w from z to 100 do if $x^3 = y^3 + z^3 + w^3$ then $c := c + 1$: print($[x[]^3 = y[]^3 + z[]^3 + w[]^3]$)[$H \cdot E[No=c]$]] fi:od:od:od:od:

$$[6^3 = 3^3 + 4^3 + 5^3]_{H \cdot E_{No=1}}$$

$$[9^3 = 1^3 + 6^3 + 8^3]_{H \cdot E_{No=2}}$$

$$[12^3 = 6^3 + 8^3 + 10^3]_{H \cdot E_{No=3}}$$

$$[18^3 = 2^3 + 12^3 + 16^3]_{H \cdot E_{No=4}}$$

$$[18^3 = 9^3 + 12^3 + 15^3]_{H \cdot E_{No=5}}$$

$$[19^3 = 3^3 + 10^3 + 18^3]_{H \cdot E_{No=6}}$$

$$[20^3 = 7^3 + 14^3 + 17^3]_{H \cdot E_{No=7}}$$

$$[24^3 = 12^3 + 16^3 + 20^3]_{H \cdot E_{No=8}}$$

$$[25^3 = 4^3 + 17^3 + 22^3]_{H \cdot E_{No=9}}$$

$$[27^3 = 3^3 + 18^3 + 24^3]_{H \cdot E_{No=10}}$$

$$[28^3 = 18^3 + 19^3 + 21^3]_{H \cdot E_{No=11}}$$

$$[29^3 = 11^3 + 15^3 + 27^3]_{H \cdot E_{No=12}}$$

$$[30^3 = 15^3 + 20^3 + 25^3]_{H \cdot E_{No=13}}$$

$$[36^3 = 4^3 + 24^3 + 32^3]_{H \cdot E_{No=14}}$$

$$[36^3 = 18^3 + 24^3 + 30^3]_{H \cdot E_{No=15}}$$

$$[38^3 = 6^3 + 20^3 + 36^3]_{H \cdot E_{No=16}}$$

$$[40^3 = 14^3 + 28^3 + 34^3]_{H \cdot E_{No=17}}$$

$$[41^3 = 2^3 + 17^3 + 40^3]_{H \cdot E_{No=18}}$$

$$[41^3 = 6^3 + 32^3 + 33^3]_{H \cdot E_{No=19}}$$

$$[42^3 = 21^3 + 28^3 + 35^3]_{H \cdot E_{No=20}}$$

$$[44^3 = 16^3 + 23^3 + 41^3]_{H \cdot E_{No=21}}$$

$$[45^3 = 5^3 + 30^3 + 40^3]_{H \cdot E_{No=22}}$$

$$[46^3 = 3^3 + 36^3 + 37^3]_{H \cdot E_{No=23}}$$

$$[46^3 = 27^3 + 30^3 + 37^3]_{H \cdot E_{No=24}}$$

$$[48^3 = 24^3 + 32^3 + 40^3]_{H \cdot E_{No=25}}$$

$$[50^3 = 8^3 + 34^3 + 44^3]_{H \cdot E_{No=26}}$$

$$[53^3 = 29^3 + 34^3 + 44^3]_{H \cdot E_{No=27}}$$

$$[54^3 = 6^3 + 36^3 + 48^3]_{H \cdot E_{No=28}}$$

$$[54^3 = 12^3 + 19^3 + 53^3]_{H \cdot E_{No=29}}$$

$$[54^3 = 27^3 + 36^3 + 45^3]_{H \cdot E_{No=30}}$$

$$[56^3 = 36^3 + 38^3 + 42^3]_{H \cdot E_{No=31}}$$

$$[57^3 = 9^3 + 30^3 + 54^3]_{H \cdot E_{No=32}}$$

$$[58^3 = 15^3 + 42^3 + 49^3]_{H \cdot E_{No=33}}$$

$$[58^3 = 22^3 + 30^3 + 54^3]_{H \cdot E_{No=34}}$$

$$[60^3 = 21^3 + 42^3 + 51^3]_{H \cdot E_{No=35}}$$

$$[60^3 = 30^3 + 40^3 + 50^3]_{H \cdot E_{No=36}}$$

$$[63^3 = 7^3 + 42^3 + 56^3]_{H \cdot E_{No=37}}$$

$$[66^3 = 33^3 + 44^3 + 55^3]_{H \cdot E_{No=38}}$$

$$[67^3 = 22^3 + 51^3 + 54^3]_{H \cdot E_{No=39}}$$

$$[69^3 = 36^3 + 38^3 + 61^3]_{H \cdot E_{No=40}}$$

$$[70^3 = 7^3 + 54^3 + 57^3]_{H \cdot E_{No=41}}$$

$$[71^3 = 14^3 + 23^3 + 70^3]_{H \cdot E_{No=42}}$$

$$[72^3 = 8^3 + 48^3 + 64^3]_{H \cdot E_{No=43}}$$

$$[72^3 = 34^3 + 39^3 + 65^3]_{H \cdot E_{No=44}}$$

$$[72^3 = 36^3 + 48^3 + 60^3]_{H \cdot E_{No=45}}$$

$$[75^3 = 12^3 + 51^3 + 66^3]_{H \cdot E_{No=46}}$$

$$[75^3 = 38^3 + 43^3 + 66^3]_{H \cdot E_{No=47}}$$

$$[76^3 = 12^3 + 40^3 + 72^3]_{H \cdot E_{No=48}}$$

$$[76^3 = 31^3 + 33^3 + 72^3]_{H \cdot E_{No=49}}$$

$$[78^3 = 39^3 + 52^3 + 65^3]_{H \cdot E_{No=50}}$$

$$[80^3 = 28^3 + 56^3 + 68^3]_{H \cdot E_{No=51}}$$

$$[81^3 = 9^3 + 54^3 + 72^3]_{H \cdot E_{No=52}}$$

$$[81^3 = 25^3 + 48^3 + 74^3]_{H \cdot E_{No=53}}$$

$$[82^3 = 4^3 + 34^3 + 80^3]_{H \cdot E_{No=54}}$$

$$\left[82^3 = 12^3 + 64^3 + 66^3 \right]_{H \cdot E_{No=55}}$$

$$\left[82^3 = 19^3 + 60^3 + 69^3 \right]_{H \cdot E_{No=56}}$$

$$\left[84^3 = 28^3 + 53^3 + 75^3 \right]_{H \cdot E_{No=57}}$$

$$\left[84^3 = 42^3 + 56^3 + 70^3 \right]_{H \cdot E_{No=58}}$$

$$\left[84^3 = 54^3 + 57^3 + 63^3 \right]_{H \cdot E_{No=59}}$$

$$\left[85^3 = 50^3 + 61^3 + 64^3 \right]_{H \cdot E_{No=60}}$$

$$\left[87^3 = 20^3 + 54^3 + 79^3 \right]_{H \cdot E_{No=61}}$$

$$\left[87^3 = 26^3 + 55^3 + 78^3 \right]_{H \cdot E_{No=62}}$$

$$\left[87^3 = 33^3 + 45^3 + 81^3 \right]_{H \cdot E_{No=63}}$$

$$\left[87^3 = 38^3 + 48^3 + 79^3 \right]_{H \cdot E_{No=64}}$$

$$\left[88^3 = 21^3 + 43^3 + 84^3 \right]_{H \cdot E_{No=65}}$$

$$\left[88^3 = 25^3 + 31^3 + 86^3 \right]_{H \cdot E_{No=66}}$$

$$\left[88^3 = 32^3 + 46^3 + 82^3 \right]_{H \cdot E_{No=67}}$$

$$\left[89^3 = 17^3 + 40^3 + 86^3 \right]_{H \cdot E_{No=68}}$$

$$\left[90^3 = 10^3 + 60^3 + 80^3 \right]_{H \cdot E_{No=69}}$$

$$\left[90^3 = 25^3 + 38^3 + 87^3 \right]_{H \cdot E_{No=70}}$$

$$\left[90^3 = 45^3 + 60^3 + 75^3 \right]_{H \cdot E_{No=71}}$$

$$\left[90^3 = 58^3 + 59^3 + 69^3 \right]_{H \cdot E_{No=72}}$$

$$\left[92^3 = 6^3 + 72^3 + 74^3 \right]_{H \cdot E_{No=73}}$$

$$\left[92^3 = 54^3 + 60^3 + 74^3 \right]_{H \cdot E_{No=74}}$$

$$\left[93^3 = 32^3 + 54^3 + 85^3 \right]_{H \cdot E_{No=75}}$$

$$\left[95^3 = 15^3 + 50^3 + 90^3 \right]_{H \cdot E_{No=76}}$$

$$\left[96^3 = 19^3 + 53^3 + 90^3 \right]_{H \cdot E_{No=77}}$$

$$[96^3 = 48^3 + 64^3 + 80^3]_{H \cdot E_{No=78}}$$

$$[97^3 = 45^3 + 69^3 + 79^3]_{H \cdot E_{No=79}}$$

$$[99^3 = 11^3 + 66^3 + 88^3]_{H \cdot E_{No=80}}$$

$$[100^3 = 16^3 + 68^3 + 88^3]_{H \cdot E_{No=81}}$$

$$[100^3 = 35^3 + 70^3 + 85^3]_{H \cdot E_{No=82}}$$

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