

>  $\# x^2 + (x+1)^2 + (x+2)^2 + z^2 = y^2$  by  $H \bullet E$  2019-11-11 :  
 >  $c := 0$  : **for**  $h$  **from** 1 **to** 100000 **do** **for**  $x$  **from** 1 **to** 10 **do**  $e := h^2 + (h+1)^2 + (h+2)^2$   
      $+ x^2$  :**if**  $\text{floor}\left(\text{evalf}\left(e^{\frac{1}{2}}\right)\right)^2 = e$  **then**  $c := c + 1$  :**print**  
      $+ [x]^2 = \left[\text{simplify}\left(e^{\frac{1}{2}}\right)\right]^2 [No = c]$  **fi** :**od**:  
      $[4]^2 + [5]^2 + [6]^2 + [2]^2 = [9]^2 [No = 1]$   
      $[18]^2 + [19]^2 + [20]^2 + [2]^2 = [33]^2 [No = 2]$   
      $[70]^2 + [71]^2 + [72]^2 + [2]^2 = [123]^2 [No = 3]$   
      $[264]^2 + [265]^2 + [266]^2 + [2]^2 = [459]^2 [No = 4]$   
      $[988]^2 + [989]^2 + [990]^2 + [2]^2 = [1713]^2 [No = 5]$   
      $[3690]^2 + [3691]^2 + [3692]^2 + [2]^2 = [6393]^2 [No = 6]$   
      $[13774]^2 + [13775]^2 + [13776]^2 + [2]^2 = [23859]^2 [No = 7]$   
      $[51408]^2 + [51409]^2 + [51410]^2 + [2]^2 = [89043]^2 [No = 8]$ 
(1)