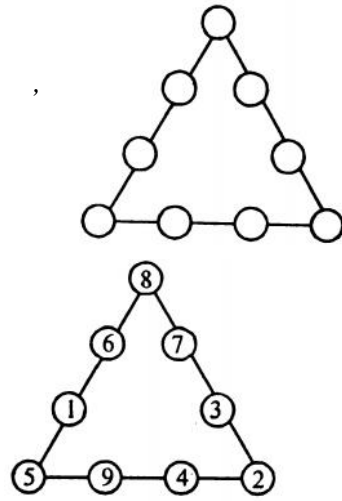
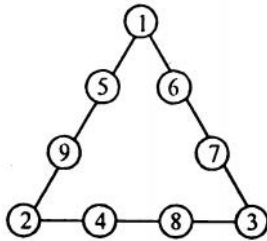


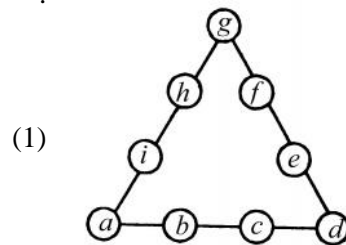
[1]

$1 \dots 9,$



$1 \dots 9,$

$$\begin{cases} a^2 + b^2 + c^2 + d^2 = S, \\ d^2 + e^2 + f^2 + g^2 = S, \\ g^2 + h^2 + i^2 + a^2 = S. \end{cases}$$



$$1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 6^2 + 7^2 + 8^2 + 9^2 = 285,$$

$$a^2 + b^2 + c^2 + d^2 + e^2 + f^2 + g^2 + h^2 + i^2 + (a^2 + d^2 + g^2) = 3S,$$

$$a^2 + d^2 + g^2 + 285 = 3S.$$

(2)  $a^2 + d^2 + g^2 = 3S$ ,  $a, d, g \in \{1, 2, 3, 4, 5, 6, 7, 8\}$

$a, d, g \in \{3, 6, 9\}$

$a=3, d=6, g=9$ .  $3^2 + 6^2 + 9^2 = 3(S - 95)$ ,  $\dots S = 137$ .

(1)  $a, d, g \in \{1, 2, 4, 5, 7, 8\}$

$$\begin{cases} b^2 + c^2 = 92, \\ e^2 + f^2 = 20, \\ h^2 + i^2 = 47. \end{cases}$$

$92 = b^2 + c^2$ ,  $47 = h^2 + i^2$

$a, d, g \in \{1, 2, 3, 4, 5, 6, 7, 8\}$

1)  $a, d, g \in \{1, 2, 3, 4, 5, 6, 7, 8\}$   $a=1, d=4, g=7$

2)  $a, d, g \in \{1, 2, 3, 4, 5, 6, 7, 8\}$   $a=2, d=5, g=8$

3)  $a, d, g \in \{1, 2, 3, 4, 5, 6, 7, 8\}$   $a=1, d=4, g=7$

4)  $a, d, g \in \{1, 2, 3, 4, 5, 6, 7, 8\}$   $a=2, d=5, g=8$

$a=1, d=4, g=7$ .  $1^2 + 4^2 + 7^2 + 285 = 3S$ ,  $S = 117$ .

(1)  $a, d, g \in \{1, 2, 4, 5, 7, 8\}$

$$\begin{cases} b^2 + c^2 = 100, \\ e^2 + f^2 = 52, \\ h^2 + i^2 = 67. \end{cases}$$

100, 1)  $a, d, g \in \{1, 2, 3, 4, 5, 6, 7, 8\}$

$$a = 2, d = 5, g = 8. \quad 2^2 + 5^2 + 8^2 + 285 = 3S, \quad -$$

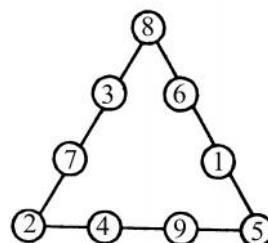
$$S = 126. \quad , \quad (1) \quad 1, 3, 4, 6, 7$$

9

$$\begin{cases} b^2 + c^2 = 97, \\ e^2 + f^2 = 37, \\ h^2 + i^2 = 58. \end{cases} \quad (2)$$

$$b = 4, c = 9, e = 1, f = 6, h = 3$$

$i = 7$  (2).



126.

3)

$$(a, d, g) = (1, 4, 2), (1, 4, 5), (1, 4, 8), (1, 7, 2), (1, 7, 5), (1, 7, 8), (4, 7, 2), (4, 7, 5), (4, 7, 8).$$

, (1)  $(a, d, g) = (4, 7, 2), \quad S = 118,$  -

$$\begin{cases} b^2 + c^2 = 53, \\ e^2 + f^2 = 65, \\ h^2 + i^2 = 98, \end{cases}$$

1, 3, 5, 6, 8 9, -

4)

$$(a, d, g) = (2, 5, 1), (2, 5, 4), (2, 5, 7), (2, 8, 1), (2, 8, 4), (2, 8, 7), (5, 8, 1), (5, 8, 4), (5, 8, 7).$$

1. , ,, , ,, , . (2020).  
( ), ,