



國際數學競賽

INTERNATIONAL MATHEMATICS COMPETITION
Changchun China, 27 July ~ 1 August 2015

120

Simplified Chinese Version

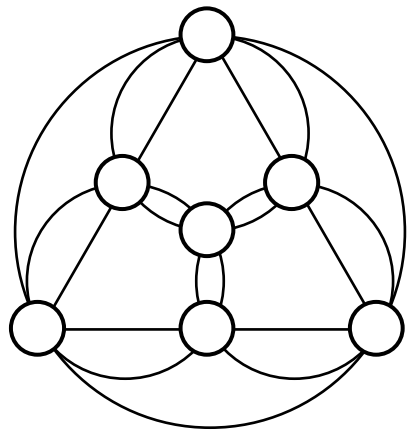
: _____ : _____ : _____ : _____

	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3		

5

1.

1 7
6



2.

$a-b$ a 1 a
 $a-b$

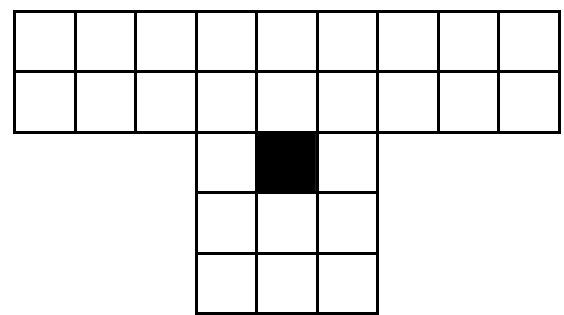
b

3.

2015 101

4.

26



5.

65 km/
13 km /

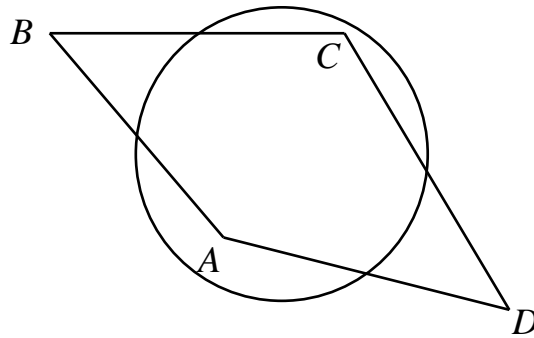
5 km /
100 km

6.

$$(x, y) \quad \frac{1}{x+1} + \frac{1}{y} + \frac{1}{(x+1)y} = \frac{1}{2015}$$

7.

ABCD *AB* *BC* *CD* *DA*
AB = 10 cm *BC* = 11 cm *CD* = 12 cm *DA* cm



cm

8.

$$\overline{ab} \quad \overline{cd} \quad \overline{ad} \quad (\overline{ab})^2 + (\overline{cd})^2 = (\overline{ad})^2$$

\overline{abcd}

9.

1×1

64

8×8

10.

$$\sqrt{7p^n + 9}$$

n

p

2. 1 2 3 4 5 6 7 8 9

3. $\begin{matrix} E & N \\ N & BE \\ BE & S \end{matrix}$ $\begin{matrix} ABCD \\ BE \\ OPS \end{matrix}$ $\begin{matrix} DC & DA \\ P & BC \\ ABCD \end{matrix}$

$AN : ND : DE = 2 : 3 : 4$
 $M \ AC \ MN \ O$

