

### 第三十四屆香港數學競賽 (2016/17)

#### 決賽規則

1. 競賽共分八項，個人及團體各佔四項。
2. 每隊由已報名參加初賽的同學組成。其中任何四位可參加「個人項目」；又其中任何四位可參加「團體項目」。不足四位同學的隊伍將不獲准出賽。
3. 每隊隊員必須穿著整齊校服，並由負責老師帶領，於上午9時正或以前向會場接待處註冊，同時必須出示身分證/學生證明文件，否則將被撤銷參賽資格。
4. 粵語將會被採用為指示語言。若參賽者不諳粵語，則可獲發給一份中、英文指示。比賽題目則中英並列。
5. 每一「個人項目」包括四部份。每一隊員回答其中一部份，其他隊友不得從旁協助，否則此項目所得分數會被取消。
6. 「個人項目」中，四部份互有關連。解答第二部份之隊員需利用第一部份之答案，如此類推。
7. 每一「團體項目」亦包括四部份。但各部份不一定相關，且可由全隊共同作答。各隊員可進行討論，但必須將聲浪降至最低。
8. 比賽時，參賽者不可使用計算工具，違例者將被取消資格或扣分。
9. 參賽者如有攜帶電子通訊器材，應把它關掉(包括響鬧功能)並放入手提包內或座位的椅下，否則大會有權取消該隊參賽資格。
10. 除另有聲明外，所有答案須為數字，並應化簡，但無需呈交證明及算草。
11. 每一項目限時五分鐘。
12. 計分辦法如下：

(甲) 準確分:	個人項目	積分	團體項目	積分
	答對第一部分	1	答對任何一部分	2
	答對第二部分	2	答對任何兩部分	4
	答對第三部分	3	答對任何三部分	7
	答對第四部分	4	答對所有四部分	10
	合共	10		

(乙) 快捷分	積分所乘倍數
<b>參賽隊伍完成並交出答案的時間 &lt; 1 分鐘</b>	<b>4</b>
<b>1 分鐘 ≤ 參賽隊伍完成並交出答案的時間 &lt; 2 分鐘</b>	<b>3</b>
<b>2 分鐘 ≤ 參賽隊伍完成並交出答案的時間 &lt; 3 分鐘</b>	<b>2</b>
<b>參賽隊伍完成並交出答案的時間 ≥ 3 分鐘</b>	<b>1</b>

#### (丙) 獎勵分

任何一隊在某一個人/團體項目競賽中，若全部答對時，可額外獲得 20 分。

#### (丁) 每項目之總分

準確分×倍數 + 獎勵分

13. 如有任何疑問，參賽者須於最後一項個人/團體賽完畢後 10 分鐘內向評判團提出。所有提出之疑問，將由評判團作最後裁決。
14. 得分最高之三隊將獲得獎盃及獎品。冠軍學校可保存總冠軍盾牌至下一屆香港數學競賽。
15. 總成績將由評判團作最後裁決。

## The Thirty-fourth Hong Kong Mathematics Olympiad (2016/17)

### Regulations (Final Events)

1. The competition consists of 8 events, which are divided into 4 individual events and 4 group events.
2. Each participating should consist of students who have enrolled in the heat event. Any 4 of them may take part in the individual event and any 4 of them may take part in the group event. Teams of less than 4 members will not be allowed to participate.
3. Members of each team, **accompanied by the teacher-in-charge, should wear proper school uniform** and present **ID Card or student identification document** when registering at the venue reception **not later than 9:00 a.m.** Failing to do so, the team **will be disqualified.**
4. Verbal instruction will be given in Cantonese. However, for competitors who do not understand Cantonese, instructions written in both Chinese and English will be provided. Question papers are printed in both English and Chinese.
5. Each individual event consists of 4 parts. Each part must be completed by one member of the team. Help from other team members would result in disqualification for that particular event.
6. In an individual event, the four parts are interrelated. When solving Part 2, one has to make use of the answer obtained in Part 1, and so on.
7. In a group event, the four parts are to be done by the whole team and the parts may or may not be interrelated. Discussions are allowed provided that voice level is kept to a minimum.
8. The use of calculating devices will not be allowed; otherwise the team will risk disqualification or deduction of marks.
9. Participants having electronic communication devices should turned them off (including the alarm function) and be put inside the bags or under the chairs. Failing to do so, the team **will risk disqualification.**
10. All answers should be numerical and reduced to the simplest form unless stated otherwise. No proof or working is required.
11. The time limit for each event is 5 minutes.
12. The Marking System is as follows:
  - (a) Scores for accuracy:

<u>Individual Events</u>	<u>Scores</u>	<u>Group Events</u>	<u>Scores</u>
Part 1 correct ...	1	Any 1 part correct	...2
Part 2 correct ...	2	Any 2 parts correct	...4
Part 3 correct ...	3	Any 3 parts correct	...7
Part 4 correct ...	4	All 4 parts correct	...10
Total .....	10		
  - (b) Multiplying factors for speed:

<i>Time taken for the teams to hand in their answer &lt; 1 min.</i>	<b>4</b>
<i>1 min. ≤ Time taken for the teams to hand in their answer &lt; 2 min.</i>	<b>3</b>
<i>2 min. ≤ Time taken for the teams to hand in their answer &lt; 3 min.</i>	<b>2</b>
<i>Time taken for the teams to hand in their answer ≥ 3 min.</i>	<b>1</b>
  - (c) Bonus Score:

Teams, which hand in their answers of anyone individual/group event have all the answers in that event correct, will be awarded a bonus score of 20 marks.
  - (d) Total score for each event:

(Score for accuracy) × (Multiplying factor) + (Bonus score)
13. Any queries should reach the Judging Panel within 10 minutes after the end of the last individual group event. The decision of the Judging Panel on the queries is final.
14. Trophies and prizes will be given to the three schools achieving the highest scores. The champion school may keep the Champion shield until the next Hong Kong Mathematics Olympiad.
15. The decision of the Judging Panel on the overall results is final.

比賽資料 決賽隊伍數目：50 決賽日期：2017 年 4 月 8 日星期六  
決賽名單：

地點：香港教育大學

<u>School ID</u>	<u>Name of School</u> <b>school</b> = new school entering final event this year
FE-01	Baptist Lui Ming Choi Secondary School
FE-02	Buddhist Sin Tak College
FE-03	Cheung Chuk Shan College
FE-04	Chinese Foundation Secondary School
FE-05	Chiu Lut Sau Memorial Secondary School
FE-06	<b>Christian Alliance S.C. Chan Memorial College</b>
FE-07	Diocesan Boys' School
FE-08	<b>Fukien Secondary School</b>
FE-09	G.T. (Ellen Yeung) College
FE-10	Good Hope School
FE-11	HKTA Tang Hin Memorial Secondary School
FE-12	Hoi Ping Chamber of Commerce Secondary School
FE-13	Hong Kong Chinese Women's Club College
FE-14	<b>Hong Kong International School</b>
FE-15	<b>Kiangsu-Chekiang College (Kwai Chung)</b>
FE-16	<b>Kiangsu-Chekiang College (Shatin)</b>
FE-17	<b>Kwun Tong Government Secondary School</b>
FE-18	La Salle College
FE-19	Maryknoll Convent School (Secondary Section)
FE-20	<b>Munsang College</b>
FE-21	Munsang College (Hong Kong Island)
FE-22	NTHYK Yuen Long District Secondary School
FE-23	<b>PLK Celine Ho Yam Tong College</b>
FE-24	PLK Mrs Ma Kam Tong College
FE-25	PLK No. 1 WH Cheung College
FE-26	PLK Tang Yuk Tien College
FE-27	Po Leung Kuk Centenary Li Shiu Chung Memorial College
FE-28	Pui Ching Middle School
FE-29	Pui Kiu College
FE-30	Queen Elizabeth School
FE-31	Queen's College
FE-32	Sha Tin Government Secondary School
FE-33	Sha Tin Methodist College
FE-34	Shatin Tsung Tsin Secondary School
FE-35	<b>Shung Tak Catholic English College</b>
FE-36	Sing Yin Secondary School
FE-37	SKH Bishop Mok Sau Tseng Secondary School
FE-38	SKH Lam Woo Memorial Secondary School
FE-39	SKH Tsang Shiu Tim Secondary School
FE-40	St Paul's Co-Educational College
FE-41	STFA Lee Shau Kee College
FE-42	<b>The ELCHK Yuen Long Lutheran Secondary School</b>
FE-43	<b>Tsuen Wan Government Secondary School</b>
FE-44	Tuen Mun Catholic Secondary School
FE-45	<b>TWGH Chen Zao Men College</b>
FE-46	<b>TWGH Mrs Wu York Yu Memorial College</b>
FE-47	TWGH Kap Yan Directors' College
FE-48	Wah Yan College, Hong Kong
FE-49	<b>Wah Yan College, Kowloon</b>
FE-50	Ying Wa College

**Hong Kong Mathematics Olympiad (2016 – 2017)**  
**Final Event 1 (Individual)**

Unless otherwise stated, all answers should be expressed in numerals in their simplest form.  
 除非特別聲明，答案須用數字表達，並化至最簡。

1. 若  $a$  為  $\frac{1}{(x+2)(x+3)} = \frac{1}{(x+1)(x+4)}$  的實數解的數量，求  $a$  的值。

$a =$

If  $a$  is the number of real roots of  $\frac{1}{(x+2)(x+3)} = \frac{1}{(x+1)(x+4)}$ , determine the value of  $a$ .

2. 若  $x$  為實數及  $b$  為  $-|x-a-9| - |10-x|$  的最大值，求  $b$  的值。  
 If  $x$  is a real number and  $b$  is the maximum value of  $-|x-a-9| - |10-x|$ , determine the value of  $b$ .

$b =$

3. 若實數  $x$  及  $y$  滿足  $4x^2 + 4y^2 + 9xy = -119b$ ，求  $xy$  的最大值  $c$ 。  
 If real numbers  $x$  and  $y$  satisfy  $4x^2 + 4y^2 + 9xy = -119b$ , determine  $c$ , the maximum value of  $xy$ .

$c =$

4. 若正實數  $x$  滿足方程  $x^2 + \frac{1}{x^2} = c$ ，求  $d = x^3 + \frac{1}{x^3}$ 。

If a positive real number  $x$  satisfies  $x^2 + \frac{1}{x^2} = c$ , determine the value of  $d = x^3 + \frac{1}{x^3}$ .

$d =$

**FOR OFFICIAL USE**

Score for  
accuracy

×

Mult. factor for  
speed

=

Team No.

+

Bonus  
score

Time



Total score

Min.

Sec.

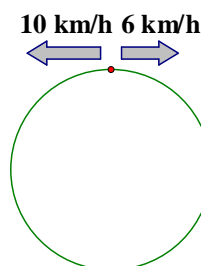
**Hong Kong Mathematics Olympiad (2016 – 2017)**  
**Final Event 2 (Individual)**

Unless otherwise stated, all answers should be expressed in numerals in their simplest form.  
 除非特別聲明，答案須用數字表達，並化至最簡。

1. 兩個學生於長 1-km 的圓形跑道的起點開始分別以 10 km/h 及 6 km/h 的速率跑沿相反方向跑步。當他們於起點再相遇時便停止跑步。  
 若  $a$  為他們開始及停止前相互經過的次數，求  $a$  的值。

$a =$

Two students run in opposite directions from a starting point of a 1-km circular track at speeds of 10 km/h and 6 km/h, respectively. They stop running when they meet each other at the starting point again. If  $a$  is number of times they cross each other after they start and before they stop, determine the value of  $a$ .



2. 袋中有若干粒紅色及藍色的彈珠，紅色彈珠與藍色彈珠的比例為 3 : 1。  
 若加入  $a$  粒藍色彈珠，紅色彈珠與藍色彈珠的比例則為 2 : 1。求彈珠的總數  $b$ 。

$b =$

There is a set of red marbles and blue marbles. When  $a$  red marbles are added to the set, the ratio of red marbles to the blue marbles is 3 : 1. When  $a$  blue marbles are added, the ratio of red marbles to blue marbles becomes 2 : 1. Determine the total number of marbles,  $b$ .

3. 若  $c$  為 1 000 000 與一個平方數之最小的相差，其中此平方數為  $b$  的倍數，求  $c$  的值。

$c =$

If  $c$  is the smallest difference between 1 000 000 and a square, where the square is a multiple of  $b$ , determine the value of  $c$ .

4. 於一個月的時間完成建築一個水庫需要  $d$  個技工或  $y$  個勞工，當中  $d + y = c$ 。  
 若挑選  $d$  個勞工去建築一個同樣的水庫，所需要的時間是挑選  $y$  個技工的 4 倍，求  $d$  的值。

$d =$

The building of a reservoir takes  $d$  technicians, or alternatively  $y$  labours to complete in a month, where  $d + y = c$ . If  $d$  labours are employed to build the same reservoir, the time taken is 4 times as much as the time taken when  $y$  technicians are employed. Determine the value of  $d$ .

**FOR OFFICIAL USE**

Score for accuracy

×

Mult. factor for speed

=

Team No.

+

Bonus score

Time



Total score

Min.

Sec.

**Hong Kong Mathematics Olympiad (2016 – 2017)**  
**Final Event 3 (Individual)**

Unless otherwise stated, all answers should be expressed in numerals in their simplest form.  
 除非特別聲明，答案須用數字表達，並化至最簡。

1. 若  $\{x_0, y_0, z_0\}$  為以下方程組的解，求  $a = x_0 + y_0 + z_0$  的值。

$$\begin{cases} 2x - 2y + z = -15 \\ x + 2y + 2z = 18 \\ 2x - y + 2z = -5 \end{cases}$$

$a =$

If  $\{x_0, y_0, z_0\}$  is a solution to the set of simultaneous equations below, determine the value of  $a = x_0 + y_0 + z_0$ .

$$\begin{cases} 2x - 2y + z = -15 \\ x + 2y + 2z = 18 \\ 2x - y + 2z = -5 \end{cases}$$

2. 求  $b = \frac{\sqrt{6+2\sqrt{a}} + \sqrt{6-2\sqrt{a}}}{2}$  的值。

Determine the value of  $b = \frac{\sqrt{6+2\sqrt{a}} + \sqrt{6-2\sqrt{a}}}{2}$ .

$b =$

3. 若  $x$  是正整數且  $\log_{10} b^x > 3$ ，求  $x$  的最小值  $c$ 。

If  $x$  is a positive integer and  $\log_{10} b^x > 3$ , determine  $c$ , the minimum value of  $x$ .

$c =$

4. 若  $f(x) = 2^0 + 2^1 + 2^2 + \cdots + 2^{x-2} + 2^{x-1}$ ，求  $d = f(c)$  的值。

If  $f(x) = 2^0 + 2^1 + 2^2 + \cdots + 2^{x-2} + 2^{x-1}$ , determine the value of  $d = f(c)$ .

$d =$

**FOR OFFICIAL USE**

Score for  
accuracy

×

Mult. factor for  
speed

=

Team No.

+

Bonus  
score

Time



Total score

Min.

Sec.

**Hong Kong Mathematics Olympiad (2016 – 2017)**  
**Final Event 4 (Individual)**

Unless otherwise stated, all answers should be expressed in numerals in their simplest form.  
 除非特別聲明，答案須用數字表達，並化至最簡。

1. 若  $a$  為正整數，求  $a$  的最大值使得  $ax^2 - (a-3)x + (a-2) = 0$  有實根。

If  $a$  is a positive integer, determine the greatest value of  $a$  such that

$ax^2 - (a-3)x + (a-2) = 0$  has real root(s).

$a =$

2. 若  $x$  及  $y$  為實數且  $1 < y < x$  及  $\log_x y + 3 \log_y x = \frac{13}{a}$ ，求  $b = \frac{x+y^4}{x^2+y^2}$  的值。

If  $x$  and  $y$  are real numbers with  $1 < y < x$  and  $\log_x y + 3 \log_y x = \frac{13}{a}$ ,

determine the value of  $b = \frac{x+y^4}{x^2+y^2}$ .

$b =$

3. 一個袋中有紅球  $b+2$  個，白球  $b+3$  個及藍球  $b+4$  個，從袋中隨機抽出 3 個並不重新放進袋中。求三個抽出的球都是相同顏色的概率  $c$  的值。

A bag contains  $b+2$  red balls,  $b+3$  white balls and  $b+4$  blue balls. Three balls are randomly drawn from the bag without replacement.

Determine the value of the probability,  $c$ , that the 3 balls are of the same colours.

$c =$

4. 若  $\cos 2\theta = c$ ，求  $d = \sin^4 \theta + \cos^4 \theta$  的值。

If  $\cos 2\theta = c$ , determine the value of  $d = \sin^4 \theta + \cos^4 \theta$ .

$d =$

**FOR OFFICIAL USE**

Score for  
accuracy

×

Mult. factor for  
speed

=

Team No.

+

Bonus  
score

Time



Total score

Min.

Sec.

# Hong Kong Mathematics Olympiad (2016– 2017)

## Final Event 1 (Group)

Unless otherwise stated, all answers should be expressed in numerals in their simplest form.

除非特別聲明，答案須用數字表達，並化至最簡。

1. 若實數  $x$ 、 $y$  及  $z$  滿足  $x + \frac{1}{y} = -1$ ， $y + \frac{1}{z} = -2$  及  $z + \frac{1}{x} = -5$ 。求  $a = \frac{1}{xyz}$  的值。

If real numbers  $x$ ,  $y$  and  $z$  satisfy  $x + \frac{1}{y} = -1$ ,  $y + \frac{1}{z} = -2$  and  $z + \frac{1}{x} = -5$ .

Determine the value of  $a = \frac{1}{xyz}$ .

$a =$

2. 若  $|x - |2x - 1|| = \frac{1}{2}$  為實數方程，求實根數量  $b$  的值。

If  $|x - |2x - 1|| = \frac{1}{2}$  is a real equation,

determine the value of  $b$ , the number of real solutions of the equation.

$b =$

3. 若實數  $x$  及  $y$  滿足  $xy > 0$  及  $x + y = 3$ ，求  $\left(1 - \frac{1}{x}\right)\left(1 - \frac{1}{y}\right)$  的最大值  $c$ 。

If real numbers  $x$  and  $y$  satisfy  $xy > 0$  and  $x + y = 3$ ,

find  $c$ , the maximum value of  $\left(1 - \frac{1}{x}\right)\left(1 - \frac{1}{y}\right)$ .

$c =$

4. 若實數  $x$  滿足  $x - \frac{1}{x} = 3$ ，求  $d = x^5 - \frac{1}{x^5}$  的值。

If a real number  $x$  satisfies  $x - \frac{1}{x} = 3$ , determine the value of  $d = x^5 - \frac{1}{x^5}$ .

$d =$

### FOR OFFICIAL USE

Score for accuracy		×	Mult. factor for speed		=	
			+	Bonus score		
				Total score		

Team No.	
Time	



**Hong Kong Mathematics Olympiad (2016 – 2017)**  
**Final Event 2 (Group)**

Unless otherwise stated, all answers should be expressed in numerals in their simplest form.  
 除非特別聲明，答案須用數字表達，並化至最簡。

1. 在六進制中，若  $A$  為  $12345_6 \div 13_6$  的餘數，求  $A$  的值。

In base-6 system, if  $12345_6 \div 13_6$  has remainder  $A$ , determine the value of  $A$ .

$A =$

2. 立方體的任意兩個頂點可相連成一線段。若  $B$  為最多所能夠相連成的直線的數量，求  $B$  的值。

Any two vertices in a cube can form a line segment. If  $B$  is the greatest number of line segments thus formed, determine the value of  $B$ .

$B =$

3. 若實數  $x$ 、 $y$  及  $z$  滿足  $(x + y + z) = 30$  及  $C = x^2 + y^2 + z^2$ ，求  $C$  的最小值。

If real numbers  $x$ ,  $y$  and  $z$  satisfy  $(x + y + z) = 30$  and  $C = x^2 + y^2 + z^2$ , determine the least value of  $C$ .

$C =$

4. 已知  $D = (x - 1)^3 + 3$ 。當  $-3 \leq x \leq 3$ ，求  $D$  的最大值。

Given that  $D = (x - 1)^3 + 3$ . Determine the greatest value of  $D$  for  $-3 \leq x \leq 3$ .

$D =$

**FOR OFFICIAL USE**

Score for  
accuracy

×

Mult. factor for  
speed

=

Team No.

+

Bonus  
score

Time



Total score

Min.

Sec.

# Hong Kong Mathematics Olympiad (2016 – 2017)

## Final Event 3 (Group)

Unless otherwise stated, all answers should be expressed in numerals in their simplest form.

除非特別聲明，答案須用數字表達，並化至最簡。

1. 設  $a, b$  及  $c$  為整數且  $1 < a < b < c$ 。若  $(ab-1)(bc-1)(ac-1)$  可被  $abc$  整除，求  $ab + bc + ac - 1$  除以  $abc$  所得之餘數  $R$  的值。

Let  $a, b$  and  $c$  be integers with  $1 < a < b < c$ . If  $(ab-1)(bc-1)(ac-1)$  is divisible by  $abc$ , determine the value of the remainder  $R$  when  $ab + bc + ac - 1$  is divided by  $abc$ .

$R =$

2. 若  $0 < x < 1$ ，求  $S = \left( \frac{\sqrt{1+x}}{\sqrt{1+x}-\sqrt{1-x}} + \frac{1-x}{\sqrt{1-x^2}+x-1} \right) \cdot \left( \sqrt{\frac{1}{x^2}-1} - \frac{1}{x} \right)$  的值。

$S =$

If  $0 < x < 1$ , determine the value of  $S = \left( \frac{\sqrt{1+x}}{\sqrt{1+x}-\sqrt{1-x}} + \frac{1-x}{\sqrt{1-x^2}+x-1} \right) \cdot \left( \sqrt{\frac{1}{x^2}-1} - \frac{1}{x} \right)$ .

3. 求方程  $x^4 + (x-4)^4 = 544$  的實根之和  $T$  的值。

Determine the value of  $T$ , the sum of real roots of  $x^4 + (x-4)^4 = 544$ .

$T =$

4. 在三角形  $ABC$  中， $BC = a$ ， $\angle ABC = \frac{\pi}{3}$  及面積為  $\sqrt{3}a^2$ 。求  $U = \tan(\angle ACB)$  的值。

In triangle  $ABC$ ,  $BC = a$ ,  $\angle ABC = \frac{\pi}{3}$  and its area is  $\sqrt{3}a^2$ .

Determine the value of  $U = \tan(\angle ACB)$ .

$y =$

### FOR OFFICIAL USE

Score for accuracy

×

Mult. factor for speed

=

Team No.

+  
Bonus score

Time



Total score

Min.

Sec.

**Hong Kong Mathematics Olympiad (2016 – 2017)**  
**Final Event 4 (Group)**

Unless otherwise stated, all answers should be expressed in numerals in their simplest form.  
 除非特別聲明，答案須用數字表達，並化至最簡。

1. 製作某玩具，需要先倒模，後上色。甲先生每日可以為 3 件玩具倒模，或為 15 件玩具上色；乙先生每日則可以為 5 件玩具倒模，或為 15 件玩具上色。各人每日只能倒模或上色，而不能同做兩事。

$d =$

若甲先生和乙先生合作，求最小多少日  $P$  才可以製作 120 件玩具。

To make a specific toy, it must be first moulded and then painted. Mr. A can mould 3 pieces of toys or paint 15 pieces of toys in one day, whereas Mr. B can mould 5 pieces or paint 15 pieces of toys in one day. Each of them can either mould or paint toys in one day, but not both. If Mr. A and Mr. B work together, determine the least number of days  $P$  to make 120 toys.

2. 在一個射鴨子遊戲中一男孩射了 10 發子彈，該男孩每發子彈射中鴨子的概率為 0.5。求他於最後一發子彈射中第六隻鴨子的概率  $Q$ 。

$Q =$

In a duck shooting game, a boy fires 10 shots. The probability of him shooting down a duck with a shot is 0.5.

Determine the probability  $Q$  of him shooting down the 6th duck at the last shot.

3. 如圖 1，求按箭咀方向由 A 往 B 的路線總數  $R$ 。

As in Figure 1 below, determine the number of ways  $R$  getting from point A to B with the direction indicated by the arrows.

$R =$

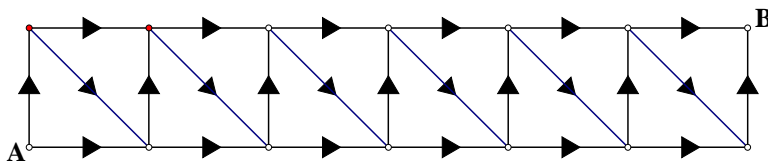


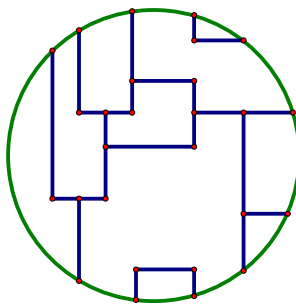
Figure 1/圖 1

4. 如果用 3 款顏料替下圖中所有區域著色，並且相鄰的區域不可用相同顏料。求同一款顏料最多可用作上色的區域數目  $S$ 。

$S =$

To shade all the regions inside the following circular map using 3 colours, for which adjacent regions must not be in the same colour.

Determine the maximum number  $S$  of regions being shaded by the same colour.



**FOR OFFICIAL USE**

Score for accuracy

×

Mult. factor for speed

=

Team No.

+  
Bonus score

Time



Total score

Min.

Sec.

# 成績 Results

School code	School Name	Ind				Isum Group				Gsum Total rank			
		Event 1	Event 2	Event 3	Event 4	Event 1	Event 2	Event 3	Event 4	Event 1	Event 2	Event 3	Event 4
FE-01	Baptist Lui Ming Choi Secondary School	0	0	5	1	6	4	40		44	50	18	
FE-02	Buddhist Sin Tak College	1	0	2	0	3	2	3		5	8	48	
FE-03	Cheung Chuk Shan College	1	0	1	1	3	2	7		9	12	44	
FE-04	Chinese Foundation Secondary School	0	0	30	3	33	4	50		54	87	4	
FE-05	Chiu Lut Sau Memorial Secondary School	8	0	30	0	38	8	40	7	62	100	5	
FE-06	Christian Alliance S.C. Chan Memorial College	3	0	3	0	6	2	30		32	38	25	
FE-07	Diocesan Boys' School	1	0	12	0	13	2	21		23	36	26	
FE-08	Fukien Secondary School	2	0	1	5	8	4	8		12	20	39	
FE-09	G.T. (Ellen Yeung) College	3	0	1	2	6	4	14		18	24	36	
FE-10	Good Hope School	0	0	0	2	2	4	4		8	10	47	
FE-11	HKTA Tang Hin Memorial Secondary School	0	0	0	0	0	0	0		0	0	49	
FE-12	Hoi Ping Chamber of Commerce Secondary School	0	0	6	1	7	0	12		12	19	40	
FE-13	Hong Kong Chinese Women's Club College	9	0	0	1	10	7	40		47	57	12	
FE-14	Hong Kong International School	1	0	9	2	12	2	14		16	28	33	
FE-15	Kiangsu-Chekiang College (Kwai Chung)	3	0	6	0	9	0	21		21	30	29	
FE-16	Kiangsu-Chekiang College (Shatin)	2	0	0	1	3	4	12		16	19	40	
FE-17	Kwun Tong Government Secondary School	0	0	2	0	2	4	21		25	27	34	
FE-18	La Salle College	30	0	40	2	72	7	40		47	119	2	
FE-19	Maryknoll Convent School (Secondary Section)	6	1	0	0	7	2	14		16	23	38	
FE-20	Munsang College	0	0	0	0	0	0	0		0	0	49	
FE-21	Munsang College (Hong Kong Island)	6	0	6	1	13	8	21		29	42	23	
FE-22	NTHYK Yuen Long District Secondary School	3	0	1	0	4	4	40		44	48	19	
FE-23	PLK Celine Ho Yam Tong College	3	0	0	1	4	0	7		7	11	46	
FE-24	PLK Mrs Ma Kam Tong College	0	0	0	3	3	4	7		11	14	42	
FE-25	PLK No. 1 WH Cheung College	6	0	9	0	15	4	50		54	69	7	
FE-26	PLK Tang Yuk Tien College	3	0	0	3	6	0	40		40	46	20	
FE-27	Po Leung Kuk Centenary Li Shiu Chung Memorial College	0	0	0	0	0	4	21		25	25	35	

## 成績 Results

FE-28	Pui Ching Middle School	30	0	30	1	61	30	40			70	131	1
FE-29	Pui Kiu College	3	0	2	1	6	0	30			30	36	26
FE-30	Queen Elizabeth School	1	0	30	0	31	4	40			44	75	6
FE-31	Queen's College	3	0	9	0	12	2	40			42	54	13
FE-32	Sha Tin Government Secondary School	3	0	1	3	7	2	30			32	39	24
FE-33	Sha Tin Methodist College	0	0	2	0	2	4	40			44	46	20
FE-34	Shatin Tsung Tsin Secondary School	1	0	1	0	2	4	8			12	14	42
FE-35	Shung Tak Catholic English College	3	0	6	0	9	0	21			21	30	29
FE-36	Sing Yin Secondary School	2	0	40	0	42	7	40			47	89	3
FE-37	SKH Bishop Mok Sau Tseng Secondary School	3	0	6	0	9	4	40			44	53	15
FE-38	SKH Lam Woo Memorial Secondary School	3	0	4	0	7	4	40			44	51	17
FE-39	SKH Tsang Shiu Tim Secondary School	3	0	3	0	6	4	14			18	24	36
FE-40	St Paul's Co-Educational College	1	0	0	3	4	7	50			57	61	10
FE-41	STFA Lee Shau Kee College	3	3	30	0	36	4	14			18	54	13
FE-42	The ELCHK Yuen Long Lutheran Secondary School	3	0	30	1	34	2	30			32	66	9
FE-43	Tsuen Wan Government Secondary School	2	0	9	0	11	4	14			18	29	31
FE-44	Tuen Mun Catholic Secondary School	1	0	0	0	1	7	4			11	12	44
FE-45	TWGH Chen Zao Men College	0	0	1	0	1	2	30			32	33	28
FE-46	TWGH Mrs Wu York Yu Memorial College	3	0	3	0	6	2	21			23	29	31
FE-47	TWGH Kap Yan Directors' College	6	0	0	1	7	4	50			54	61	10
FE-48	Wah Yan College, Hong Kong	6	0	9	0	15	2	50			52	67	8
FE-49	Wah Yan College, Kowloon	2	0	0	1	3	2	40			42	45	22
FE-50	Ying Wa College	3	0	0	1	4	8	40			48	52	16

Champion	Pui Ching Middle School
1st runner up	La Salle College
2nd runner up	Chinese Foundation Secondary School