第三十三屆香港數學競賽(2015/16)
初賽規則

1. 初賽分個人項目、團體項目和幾何作圖項目三部分，個人項目限時六十分鐘，團體項目限時二十分鐘，而幾何作圖項目則限時二十分鐘。
2. 每隊由四至六位中五或以下同學組成。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及幾何作圖項目。不足四位同學的隊伍將被撤銷參賽資格。
3. 每隊隊員**必須穿著整齊校服**，**並由負責教師帶領**，於上午9時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. 指示語言將採用粵語。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、英文並列。
5. 每一隊員於個人項目中須解答15條問題（**當中甲部佔10題、乙部佔5題**）；而每一隊伍則須於團體項目中解答10條問題；並在幾何作圖項目中解答1-3條問題。
6. 團體項目及幾何作圖項目中，各參賽隊員可進行討論，但必須將聲浪降至最低。
7. 各參賽隊伍須注意：
   (a) 個人項目及團體項目比賽時，**不准使用**計算機、四位對數表、量角器、圓規、三角尺及直尺等工具，
   (b) 幾何作圖項目比賽時，**只准使用**書寫工具（例如: 原子筆、鉛筆等）、圓規及大會提供的直尺，違例隊伍將被撤銷參賽資格或扣分。
8. **除非另有聲明**，**否則所有個人項目及團體項目中問題的答案均為數字**，**並應化至最簡**，**但無須呈交證明及算草**。
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。
10. 個人項目中，甲部和乙部的每一正確答案分別可得1分及2分。每隊可得之最高積分為80分。
11. 團體項目中，每一正確答案均可得2分。每隊可得之最高積分為20分。
12. 至於幾何作圖項目，每隊可得之最高積分為20分（必須詳細列出所有步驟，包括作圖步驟）。
13. 初賽中，並不給予快捷分。
14. 參賽者必須自備工具，例如：**原子筆**、**鉛筆及圓規**。
15. 籌委會將根據各參賽隊伍的總成績（個人項目、團體項目及幾何作圖項目的積分總和）選出最高積分的五十隊進入決賽。
16. 初賽獎項：
   (a) 於個人項目比賽中，
      (i) 取得滿分者將獲頒予最佳表現及積分獎狀；
      (ii) 除上述 (*i*) 中取得最佳表現的參賽者外，
         (1) 成績最佳的首2% 參賽者將獲頒予一等榮譽獎狀；
         (2) 隨後的5% 參賽者將獲頒予二等榮譽獎狀；
         (3) 緊接著的10% 參賽者將獲頒予三等榮譽獎狀。
   (b) 於團體項目中取得滿分的隊伍將獲頒予最佳表現及積分獎狀。
   (c) 於幾何作圖項目中表現優秀的隊伍將獲頒予獎狀。
   (d) 於各分區的比賽中，總成績（個人項目、團體項目及幾何作圖項目的積分總和）最高之首10%的參賽隊伍將獲頒予獎狀。
17. 如有任何疑問，參賽者須於比賽完畢後，立即向會場主任提出。所提出之疑問，將由籌委會作最後裁決。

The Thirty-third Hong Kong Mathematics Olympiad (2015/16)
Regulations (Heat Events)

1. The Heat Events consists of three parts: 60 minutes for the individual event, 20 minutes for the group event and 20 minutes for the geometric construction event.
2. Each team should consist of 4 to 6 members who are students of **Secondary 5** level or below. Any 4 of them may take part in the individual event and any 4 of them may take part in the group event and the geometric construction event. Teams of less than 4 members will be disqualified.
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 instructions will be given in Cantonese. However, for competitors who do not understand Cantonese, written instructions in both Chinese and English will be provided. Question papers are printed in both Chinese and English.
5. Each member of a team has to solve 15 questions in the individual event (***10 questions in Part A*** and ***5 questions in Part B***) and each team has to solve 10 questions in the group event and 1 to 3 questions in the geometric construction event.
6. In the group event and geometric construction event, discussions among participating team members are allowed provided that the voice level is kept to a minimum.
7. Please note that
   (a) for the individual and group events, devices such as calculators, four-figure tables, protractors, compasses, set squares and rulers will not be allowed to be used; and
   (b) for the geometric construction event, only writing instruments (e.g. pens, pencils, etc), **straightedge provided and compasses** will be allowed to be used;

   otherwise the team will be disqualified or risk deduction of marks.
8. **All answers in the individual event and the group event should be numerical and reduced to the simplest form unless stated otherwise. No proof or demonstration of work is required.**
9. Participants having electronic communication devices should have them turned off (including the alarm function) and put them inside their bags or under their chairs.
10. For the individual event, 1 mark and 2 marks will be given to each correct answer in Part A and Part B respectively. The maximum score for a team should be 80.
11. For the group event, 2 marks will be given to each correct answer. The maximum score for a team should be 20.
12. For the geometric construction event, the maximum score for a team should be 20 (all working, including construction work, must be clearly shown).
13. No mark for speed will be awarded in the Heat Event.
14. Participants should bring along their own instruments, e.g. **ball pens**, **pencils and compasses**.
15. The 50 teams with the highest aggregate scores (sum of the scores in the individual event, the group event and the geometric construction event) will be qualified for the Final Event.
16. Awards of the Heat Event:
   (a) For the individual event,
      (i) candidates obtaining full score will be awarded Best Performance and Score certificates ;
      (ii) apart from the best performer(s) in (*i*),
         (1) the first 2% of top scoring candidates will be awarded First-class honour certificates ;
         (2) the next 5% of top scoring candidates will be awarded Second-class honour certificates ; and
         (3) the next 10% of top scoring candidates will be awarded Third-class honour certificates;
   (b) For the group event, teams obtaining full marks will be awarded Best Performance and Score certificates.
   (c) For the geometric construction event, teams having outstanding performance will be awarded certificates of merit.
   (d) About 10% of participating schools with the highest aggregate scores (sum of the scores in the individual event, the group event and the geometric construction event) in each region will be awarded certificates of merit.
17. Should there be any queries, participants should reach the Centre Supervisor immediately after the competition. The decision of the Organising Committee on the queries is final.

Hong Kong Mathematics Olympiad 2015-2016
Heat Event (Individual) Sample Paper
香港數學競賽 2015 – 2016
初賽項目 (個人) 模擬試卷

除非特別聲明，答案須用數字表達，並化至最簡。 時限：1 小時 Time allowed: 1 hour
Unless otherwise stated, all answers should be expressed in numerals in their simplest form.
Q1- Q10 每題 1 分，Q11-Q15 每題 2 分。Q1- Q10 1 mark each, Q11-Q15 2 marks each.
全卷滿分 20 分。The maximum mark for this paper is 20 .

1. 整數 x 減去 12 後是一個整數的平方。將 x 加上 19 後則是另一個整數的平方。求 x 的值。

   An integer x minus 12 is the square of an integer. x plus 19 is the square of another integer. Find the value of x. (2011 HI5)

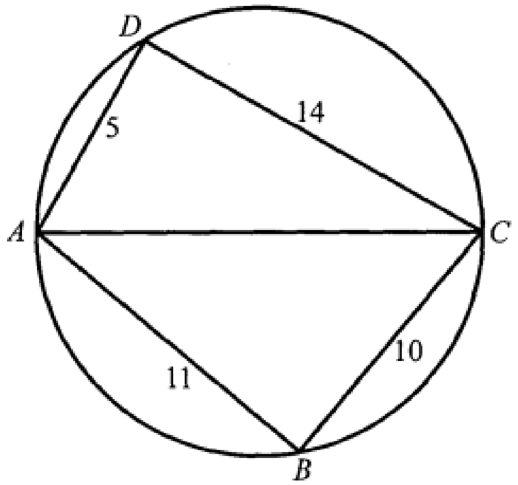
2. 已知 $\left(10^{2015}\right)^{-10^2}=0.\underbrace{000\cdots0}_{n\text{個}0}1$，求 n 的值。

   Given that $\left(10^{2015}\right)^{-10^2}=0.\underbrace{000\cdots0}_{n\text{ times}}1$. Find the value of n. (2015 HI2)

3. 如圖一所示，$ABCD$ 為圓內接四邊形，其中 $AD = 5$、$DC = 14$、$BC = 10$ 及 $AB = 11$。求四邊形 $ABCD$ 的面積。

   As shown in Figure 1, $ABCD$ is a cyclic quadrilateral, where $AD = 5$, $DC = 14$, $BC = 10$ and $AB = 11$. Find the area of quadrilateral $ABCD$.

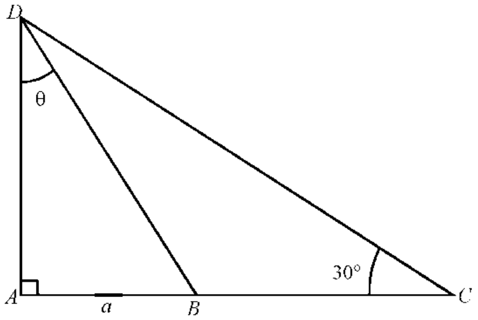
   (2014 HI5)



圖一 Figure 1

4. 圖二所示為一直角三角形 ACD，其中 B 是 AC 上的點且 $BC = 2AB$。已知 $AB = a$ 及 $\angle ACD = 30°$，求 θ 的值。

   Figure 2 shows a right-angled triangle ACD where B is a point on AC and $BC = 2AB$. Given that $AB = a$ and $\angle ACD = 30°$, find the value of θ.



圖二 Figure 2

5. 學校推出每張面值為\$10、\$15、\$25 及 \$40 的四種賣物券。甲班用若干張\$100 紙幣買了 30 張賣物券，包括其中兩種賣物券各 5 張及另外兩種賣物券各 10 張。問甲班共用了多少張 \$100 紙幣購買賣物券？

   A school issues 4 types of raffle tickets with face values \$10, \$15, \$25 and \$40. Class A uses several one-hundred dollar notes to buy 30 raffle tickets, including 5 tickets each for two of the types and 10 tickets each for the other two types. How many one-hundred dollars notes Class A use to buy the raffle tickets? (2011 HI8)

6. 求 2^{2011} 除以 13 的餘數。

   Find the remainder when 2^{2011} is divided by 13. (2011 HI1)

7. $2^{20}\times25^{12}$ 是一個多少個位的數？
Find the number of places of the number $2^{20}\times25^{12}$. (2012 HI4)

8. 甲、乙及丙三人互相傳球。甲首先將球傳出。有多少不同方案使得經過 5 次傳球後，球會回傳給甲？
A, B and C pass a ball among themselves. A is the first one to pass the ball to other one. In how many ways will the ball be passed back to A after 5 passes? (2011 HI6)

9. 已知 a 及 b 為不同質數，且 $a^2-19a+m=0$ 及 $b^2-19b+m=0$，求 $\frac{a}{b}+\frac{b}{a}$ 的值。
Given that a and b are distinct prime numbers, $a^2-19a+m=0$ and $b^2-19b+m=0$. Find the value of $\frac{a}{b}+\frac{b}{a}$. (2012 HI6)

10. 已知 $a_1, a_2, \dots, a_n, \dots$ 為一正實數序列，其中 $a_1=1$ 及 $a_{n+1}=a_n+\sqrt{a_n}+\frac{1}{4}$。求 a_{2015} 的值。
It is given that $a_1, a_2, \dots, a_n, \dots$ is a sequence of positive real numbers such that $a_1=1$ and $a_{n+1}=a_n+\sqrt{a_n}+\frac{1}{4}$. Find the value of a_{2015}. (2015 HI5)

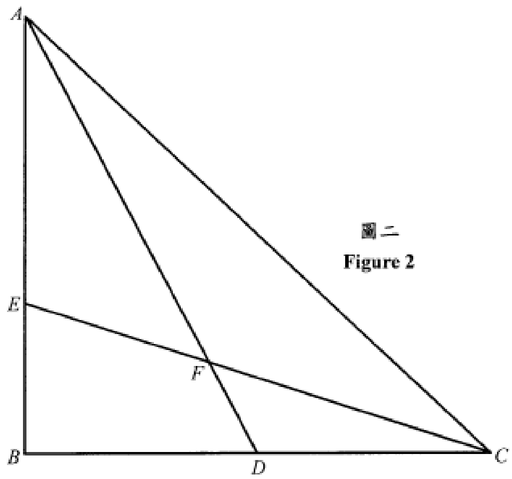
11. 若方程 $(k^2-4)x^2-(14k+4)x+48=0$ 有兩個相四異的正整數根，求 k 的值。
If the quadratic equation $(k^2-4)x^2-(14k+4)x+48=0$ has two distinct positive integral roots, find the value(s) of k. (2012 HI8)

12. 已知 $y=(x+1)(x+2)(x+3)(x+4)+2013$，求 y 的最小值。
Given that $y=(x+1)(x+2)(x+3)(x+4)+2013$, find the minimum value of y. (2013 HI5)

13. 在 1 至 2015 之間 (包括 1 及 2015 在內) 有多少對相異整數的積是 5 的倍數?
How many pairs of distinct integers between 1 and 2015 inclusively have their products as multiple of 5? (2015 HI1)

14. 設 x 實數。求 $\sqrt{x^2-4x+13}+\sqrt{x^2-14x+130}$ 的最小值。 (2015 HI9)
Let x be a real number. Find the minimum value of $\sqrt{x^2-4x+13}+\sqrt{x^2-14x+130}$.

15. 如圖二，$AE=14$、$EB=7$、$AC=29$ 及 $BD=DC=10$。求 BF^2 的值。
In figure 2, $AE=14$, $EB=7$, $AC=29$ and $BD=DC=10$. Find the value of BF^2.
(2012 HI10)



*** 試卷完 End of Paper ***

Hong Kong Mathematics Olympiad 2015-2016
Heat Event (Individual)
香港數學競賽 2015 – 2016
初賽項目(個人)

除非特別聲明，答案須用數字表達，並化至最簡。 時限：1 小時 Time allowed: 1 hour
Unless otherwise stated, all answers should be expressed in numerals in their simplest form.
Q1- Q10 每題 1 分，Q11-Q15 每題 2 分。Q1- Q10 1 mark each, Q11-Q15 2 marks each.
全卷滿分 20 分。The maximum mark for this paper is 20 .

1. 計算 $0.125^{2016}\times(2^{2017})^3$ 的值。

   Find the value of $0.125^{2016}\times(2^{2017})^3$.

2. 已知方程 $\begin{cases} x_1+x_2=x_2+x_3=x_3+x_4=\cdots=x_{2014}+x_{2015}=x_{2015}+x_{2016}=1 \\ x_1+x_2+x_3+\cdots+x_{2015}+x_{2016}=x_{2016} \end{cases}$，求 x_1 的值。

   Given the equations $\begin{cases} x_1+x_2=x_2+x_3=x_3+x_4=\cdots=x_{2014}+x_{2015}=x_{2015}+x_{2016}=1 \\ x_1+x_2+x_3+\cdots+x_{2015}+x_{2016}=x_{2016} \end{cases}$, find the value of x_1.

3. 有多少個 x 使得 $\sqrt{2016-\sqrt{x}}$ 為整數？

   How many x are there so that $\sqrt{2016-\sqrt{x}}$ is an integer?

4. 若 x、y 為整數，有多少對 x、y 且滿足 $(x+1)^2+(y-2)^2=50$？

   If x, y are integers, how many pairs of x, y are there which satisfy the equation $(x+1)^2+(y-2)^2=50$?

5. 63 個連續整數的和是 2016，求緊接該 63 個連續整數後的 63 個連續整數的和。

   The sum of 63 consecutive integers is 2016, find the sum of the next 63 consecutive integers.

6. 已知 8 個整數的平均數、中位數、分佈域及唯一眾數均為 8。若 A 為該 8 個整數中的最大數，求 A 的最大值。

   Given that the mean, median, range and the only mode of 8 integers are also 8. If A is the largest integer among those 8 integers, find the maximum value of A.

7. 在整數 1 至 500 之間出現了多少個數字「2」？

   How many '2's are there in the numbers between 1 to 500?

8. 某數的 16 進制位是 1140。而同一數字的 a 進制位是 240，求 a。

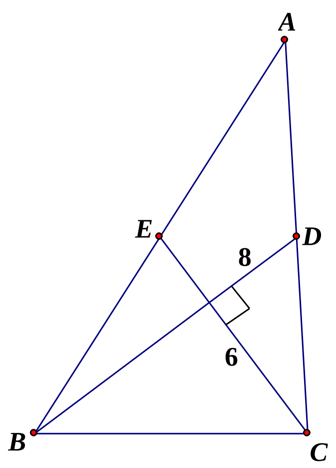
   A number in base 16 is 1140. The same number in base a is 240, what is a ?

9. P 點的極座標為 $(6, 240°)$。若 P 向右平移 16 單位，求 P 的像與極點之間的距離。

   The polar coordinates of P are $(6, 240°)$. If P is translated to the right by 16 units, find the distance between its image and the pole.

10. 如圖一，在 ΔABC 中，BD 和 CE 分別是 AC 和 AB 兩邊上的中綫，且 $BD\perp CE$。已知 $BD=8$，$CE=6$，求ΔABC 的面積。

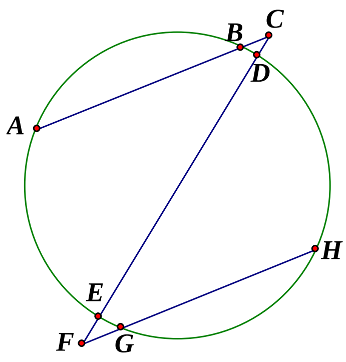
    As shown in Figure 1, BD and CE are the medians of the sides AC and AB of ΔABC respectively, and $BD\perp CE$. Given that $BD=8$, $CE=6$, find the area of ΔABC.



圖一
Figure 1

11. 已知方程 $100[\log(63x)][\log(32x)] + 1 = 0$ 有兩個相異的實數根 α 及 β，求 αβ 的值。
It is known that the equation $100[\log(63x)][\log(32x)] + 1 = 0$ has two distinct real roots α and β. Find the value of αβ.

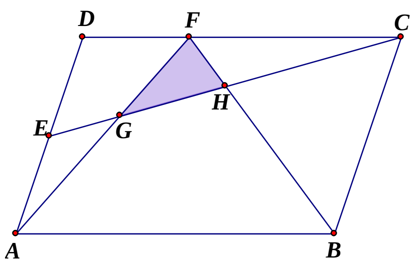
12. 如圖二所示，*ABC*，*CDEF* 及 *FGH* 皆為直綫，且 *ABC* // *FGH*。*AB* = 42，*GH* = 40，*EF* = 6 及 *FG* = 8。已知 *ABC* 與 *FGH* 之間的距離為 41，求 *BC*。
As shown in Figure 2, *ABC*, *CDEF* and *FGH* are straight lines, *ABC* // *FGH*, *AB* = 42, *GH* = 40, *EF* = 6 and *FG* = 8. Given that the distance between *ABC* and *FGH* is 41, find *BC*.



圖二
Figure 2

13. 設 *A*、*B* 和 *C* 為三個數字。利用這三個數字組成的三位數有以下性質：
(a) *ACB* 可以被 3 整除；
(b) *BAC* 可以被 4 整除；
(c) *BCA* 可以被 5 整除；及
(d) *CBA* 的因數數目為單數。
求三位數 *ABC*。
Let *A*, *B* and *C* be three digits. The number formed by these three digits has the following properties:
(a) *ACB* is divisible by 3;
(b) *BAC* is divisible by 4;
(c) *BCA* is divisible by 5;
(d) *CBA* has an odd number of factors.
Find the 3-digit number *ABC*.

14. 在圖三中，*ABCD* 為一平行四邊形，*E* 為 *AD* 上的中點及 *F* 為 *DC* 上的點且滿足 *DF* : *FC* = 1 : 2。*FA* 及 *FB* 分別相交 *EC* 於 *G* 及 *H*，求 $\dfrac{ABCD\text{的面積}}{\Delta FGH\text{的面積}}$ 的值。
As shown in Figure 3, *ABCD* is a parallelogram. *E* is the mid-point of *AD* and *F* is a point on *DC* such that *DF* : *FC* = 1 : 2. *FA* and *FB* intersect *EC* at *G* and *H* respectively. Find the value of $\dfrac{\text{Area of } ABCD}{\text{Area of } \Delta FGH}$.



圖三
Figure 3

15. 已知數列$\{a_n\}$，其中 $a_{n+2} = a_{n+1} - a_n$。若 $a_2 = -1$ 及 $a_3 = 1$，求 a_{2016} 的值。
Given a sequence $\{a_n\}$, where $a_{n+2} = a_{n+1} - a_n$. If $a_2 = -1$ and $a_3 = 1$, find the value of a_{2016}.

*** 試卷完 **End of Paper** ***

Hong Kong Mathematics Olympiad 2015-2016
Heat Event (Group)
香港數學競賽 2015 – 2016
初賽項目(團體)

除非特別聲明，答案須用數字表達，並化至最簡。 時限：20 分鐘 Time allowed: 20 minutes
Unless otherwise stated, all answers should be expressed in numerals in their simplest form.
每題正確答案得兩分。Each correct answer will be awarded 2 marks.
全卷滿分 20 分。The maximum mark for this paper is 20 .

1. 最初甲瓶裝有 1 公升酒精，乙瓶是空的。

第 1 次將甲瓶全部的酒精倒入乙瓶中，第 2 次將乙瓶酒精的 $\frac{1}{2}$ 倒回甲瓶，

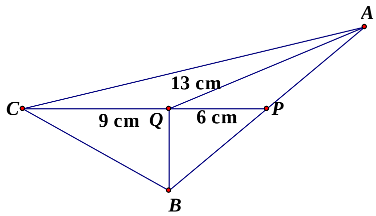
第 3 次將甲瓶酒精的 $\frac{1}{3}$ 倒回乙瓶，第 4 次將乙瓶酒精的 $\frac{1}{4}$ 倒回甲瓶，……。

第 2016 次後，甲瓶還有多少公升酒精？

At the beginning, there was 1 litre of alcohol in bottle A and bottle B is an empty bottle. First, pour all alcohol from bottle A to bottle B; second, pour $\frac{1}{2}$ of the alcohol from bottle B back to bottle A; third, pour $\frac{1}{3}$ of the alcohol from bottle A to bottle B; fourth, pour $\frac{1}{4}$ of the alcohol from bottle B back to bottle A, $\cdots$. After the 2016$^{\text{th}}$ pouring, how much alcohol was left in bottle A?

2. 圖一顯示ΔABC，P 為 AB 的中點及 Q 是 CP 上的一點。已知 $BQ \perp CP$，$PQ = 6$ cm、$CQ = 9$ cm 及 $AQ = 13$ cm。求 ΔABC 的面積。

Figure 1 shows ΔABC, P is the mid-point of AB and Q is a point on CP. It is known that $BQ \perp CP$, $PQ = 6$ cm, $CQ = 9$ cm and $AQ = 13$ cm. Find the area of ΔABC.



圖一
Figure 1

3. 考慮數列 $a_1, a_2, a_3, \cdots$ 。定義 $S_n = a_1 + a_2 + \cdots + a_n$ 其中 n 為任何正整數。

若 $S_n = 2 - a_n - \frac{1}{2^{n-1}}$ ，求 a_{2016} 的值。

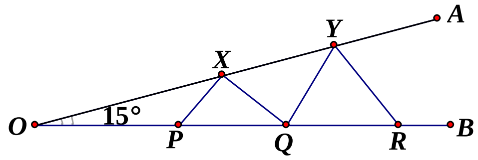
Consider a sequence of numbers $a_1, a_2, a_3, \cdots$. Define $S_n = a_1 + a_2 + \cdots + a_n$ for any positive integer n. Find the value of a_{2016} if $S_n = 2 - a_n - \frac{1}{2^{n-1}}$.

4. 設 x 及 y 為正整數且滿足 $\log x + \log y = \log(2x - y) + 1$，求 (x, y) 的數量。

If x and y are positive integers that satisfy $\log x + \log y = \log(2x - y) + 1$, find the number of possible pairs of (x, y).

5. 圖二中，$\angle AOB = 15°$。X、Y 是 OA 上的點，P、Q、R 是 OB 上的點使得 $OP = 1$ 及 $OR = 3$。
若 $s = PX + XQ + QY + YR$，求 s 的最小值。

In Figure 2, $\angle AOB = 15°$. X, Y are points on OA, P, Q, R are points on OB such that $OP = 1$ and $OR = 3$.
If $s = PX + XQ + QY + YR$, find the least value of s.



圖二
Figure 2

6. 設 $y = px^2 + qx + r$ 為一二次函數。已知

(1) y 的對稱軸為 $x = 2016$。

(2) 該函數的圖像通過 x 軸於 A、B 兩點，其中 $AB = 4$ 單位。

(3) 該函數的圖像通過直綫 $y = -10$ 於 C、D 兩點，其中 $CD = 16$ 單位。

求 q 的值。

Let $y = px^2 + qx + r$ be a quadratic function. It is known that

(1) The axis of symmetry of y is $x = 2016$.

(2) The curve cuts the x-axis at two points A and B such that $AB = 4$ units.

(3) The curve cuts the line $y = -10$ at two points C and D such that $CD = 16$ units.

Find the value of q.

7. 設三角形三條中綫的長度為 9、12 及 15。求該三角形的面積。

The lengths of the three medians of a triangle are 9, 12 and 15. Find the area of the triangle.

8. 若某正整數的二進位表示有以下特質：

(1) 有 11 個位，

(2) 有六個位是 1，有五個位是零，

則稱該數為「好數」。

(例如：2016 是一個「好數」，因為 $2016 = 11111100000_2$。)

求所有「好數」的和。

If the binary representation of a positive integer has the following properties:

(1) the number of digits = 11,

(2) the number of 1's = 6 and the number of 0's = 5,

then the number is said to be a "good number".

(For example, 2016 is a "good number" as $2016 = 11111100000_2$.)

Find the sum of all "good numbers".

9. 設整數 a、b 及 c 為三角形的邊長。已知 $f(x) = x(x-a)(x-b)(x-c)$，且 x 為一個大於 a、b 及 c 的整數。若 $x = (x-a)+(x-b)+(x-c)$ 及 $f(x) = 900$，求該三角形三條垂高的總和。

Let the three sides of a triangle are of lengths a, b and c where all of them are integers. Given that $f(x) = x(x-a)(x-b)(x-c)$ where x is an integer of size greater than a, b and c.

If $x = (x-a)+(x-b)+(x-c)$ and $f(x) = 900$, find the sum of the lengths of the three altitudes of this triangle.

10. 求 $\dfrac{1^4+2015^4+2016^4}{1^2+2015^2+2016^2}$ 的值。

Find the value of $\dfrac{1^4+2015^4+2016^4}{1^2+2015^2+2016^2}$.

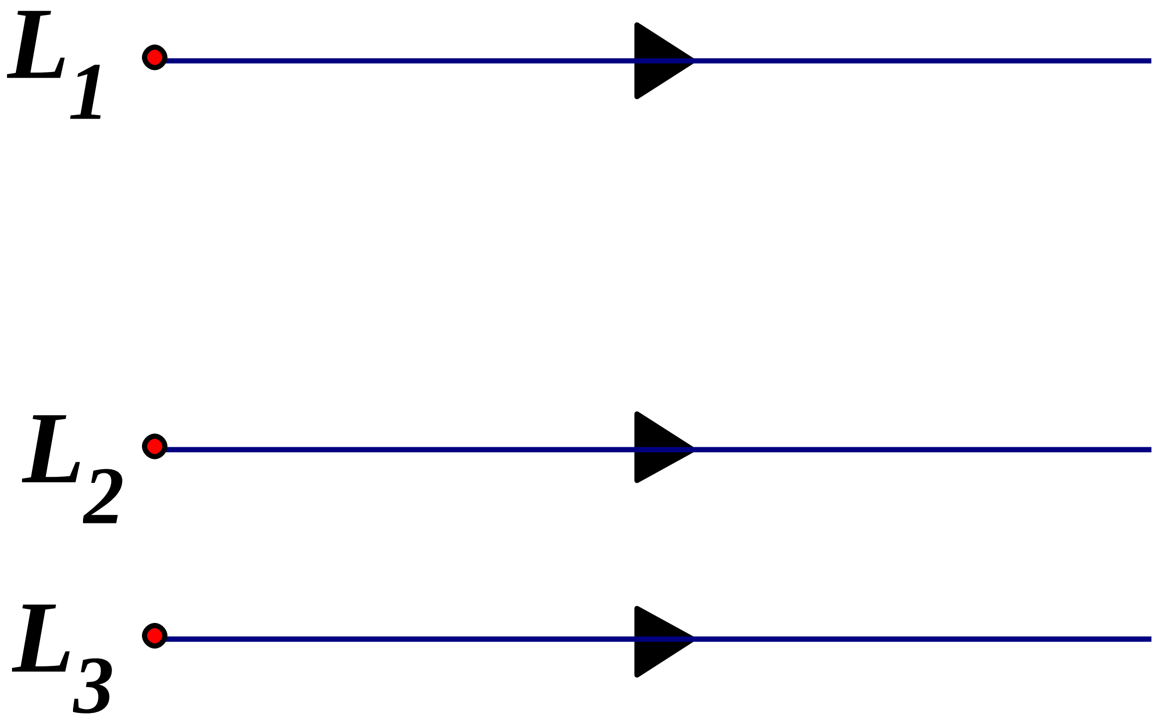
***** 試卷完 End of Paper *****

Hong Kong Mathematics Olympiad 2015 – 2016
Heat Event (Geometric Construction)
香港數學競賽 2015 – 2016
初賽(幾何作圖)

每隊必須列出詳細所有步驟(包括作圖步驟)。 時限：20 分鐘
All working (including geometric drawing) must be clearly shown.
此部份滿分為二十分。The full marks of this part is 20 marks. Time allowed: 20 minutes

School ID: ______________________________
School Name: ______________________________

第一題 Question No. 1
假設有三條不同的平行綫，L_1、L_2 及 L_3。構作一個等邊三角形，其中每條平行綫只會有一個頂點存在。
Suppose there are three different parallel lines, L_1, L_2 and L_3. Construct an equilateral triangle with only one vertex lies on each of the three parallel lines.



Hong Kong Mathematics Olympiad 2015 – 2016
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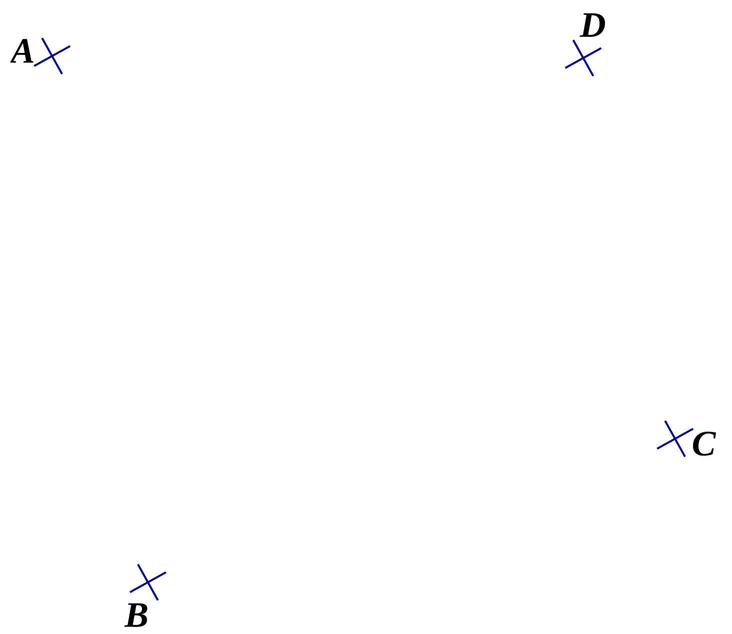
School ID: ______________________________

School Name: ______________________________

第二題 Question No. 2

下圖所示為四點 A、B、C 及 D，構作一個通過這四點的正方形。

Given four points A, B, C and D as shown in the figure below, construct a square which passes through these four points.



***** 試卷完 End of Paper *****

參加學校數目：219

初賽日期：2016 年 2 月 27 日星期六

試場一(HK1)：中華傳道會劉永生中學 (40 隊)

試場二(KLN1)：香海正覺蓮社佛教正覺中學 (56 隊)

試場三(KLN2)：伊利沙伯中學 (40 隊)

試場四(NT1)：聖公會曾肇添中學 (38 隊)

試場四(NT2)：中華基督教會基朗中學 (50 隊)

Regional winners of the Heat Event

Hong Kong Island Region

Position	**School Name**
Winner	Queen's College
1st Runner-up	St Joseph's College
2nd Runner-up	St Paul's Co-Educational College
4th Place	King's College

Kowloon Region 1

Position	**School Name**
Winner	La Salle College
1st Runner-up	Pui Ching College
2nd Runner-up	PLK No.1 WH Cheung College
4th Place	Diocesan Boys' School
5th Place	Good Hope School

Kowloon Region 2

Position	**School Name**
Winner	Ying Wa College
1st Runner-up	Queen Elizabeth School
2nd Runner-up	Tsuen Wan Public Ho Chuen Yiu Memorial College
4th Place	Diocesan Girl's School

New Territories Region 1

Position	**School Name**
Winner	HKTA Tang Hin Memorial Secondary School
1st Runner-up	Baptist Lui Ming Choi Secondary School
2nd Runner-up	Pui Kiu College
4th Place	Shatin Tsung Tsin Secondary School

New Territories Region 2

Position	**School Name**
Winner	STFA Leung Kau Kui College
1st Runner-up	PLK Centenary Li Shiu Chung Memorial College
2nd Runner-up	Chiu Lut Sau Memorial Secondary College
4th Place	Yuen Long Merchants Association Secondary School
5th Place	STFA Lee Shau Kee College

School ID	Name of School
FE-01	Baptist Lui Ming Choi Secondary School
FE-02	Bishop Hall Jubilee School
FE-03	Buddhist Sin Tak College
FE-04	Carmel Pak U Secondary School
FE-05	Carmel Secondary School
FE-06	CCC Heep Woh College
FE-07	Cheung Chuk Shan College
FE-08	Chinese Foundation Secondary School
FE-09	Chiu Lut Sau Memorial Secondary School
FE-10	CNEC Christian College
FE-11	Diocesan Boys' School
FE-12	G.T. (Ellen Yeung) College
FE-13	Good Hope School
FE-14	HKTA Tang Hin Memorial Secondary School
FE-15	Hoi Ping Chamber of Commerce Secondary School
FE-16	HKBU Affiliated School Wong Kam Fai Secondary and Primary School
FE-17	Hong Kong Chinese Women's Club College
FE-18	King's College
FE-19	La Salle College
FE-20	Maryknoll Convent School (Secondary Section)
FE-21	Munsang College (Hong Kong Island)
FE-22	NTHYK Yuen Long District Secondary School
FE-23	PLK Centenary Li Shiu Chung Memorial College
FE-24	PLK No. 1 WH Cheung College
FE-25	PLK Tang Yuk Tien College
FE-26	Pui Ching Middle School
FE-27	Pui Kiu College
FE-28	Queen Elizabeth School
FE-29	Queen's College
FE-30	Sha Tin Government Secondary School
FE-31	Sha Tin Methodist College
FE-32	Shatin Tsung Tsin Secondary School
FE-33	Sing Yin Secondary School
FE-34	SKH Bishop Mok Sau Tseng Secondary School
FE-35	SKH Lam Woo Memorial Secondary School
FE-36	SKH Tsang Shiu Tim Secondary School
FE-37	South Island School
FE-38	St Joseph's College
FE-39	St Paul's Co-Educational College
FE-40	St Paul's College
FE-41	St Stephan's College
FE-42	STFA Lee Shau Kee College
FE-43	STFA Leung Kau Kui College
FE-44	Tsuen Wan Public Ho Chuen Yiu Memorial College
FE-45	Tuen Mun Catholic Secondary School
FE-46	TWGH Kap Yan Directors' College
FE-47	Wah Yan College, Hong Kong
FE-48	Wong Shiu Chi Secondary School
FE-49	Ying Wa College
FE-50	Yuen Long Merchant Association Secondary School