MathConception
2017

G2

Name:
姓名：

Reg. No.:
考生編號：

Time: 1 hour
Calculators are NOT permitted.

Instructions:

1. **DO NOT open the contest booklet until you are told to do so.**
2. **You may use pencil to write your answer and scrap papers for rough work.**
3. **All questions MUST BE answered on the answer sheet that comes with the question booklet. Any writing on the question booklet would not be accepted as answer.**
4. **Diagrams are not drawn to scale. They are intended as aids only.**

限時：1小時
不允許使用計算機。

考生須知：

1. 在考官宣佈開始前，請勿翻閱問題簿。

2. 以鉛筆作答題目。如有需要，可要求算草紙。

3. 全部題目均須作答在答題紙上。在問題簿上的任何內容均不予評閱。

4. 試卷的附圖不一定依比例繪成。

Question Booklet

問題簿

1. $69 - 17 = ?$ [**1%**]

2. $57 + 18 = ?$ [**1%**]

3. $100 - 55 = ?$ [**1%**]

4. $5 \times 3 = ?$ [**1%**]

5. $3 \times 9 = ?$ [**1%**]

6. $206 \times 10 = ?$ [**1%**]

7. $2 \times 4 \times 3 = ?$ [**1%**]

8. $2017 \times 0 = ?$ [**1%**]

9. $9 \div 3 = ?$ [**1%**]

10. $56 \div 7 = ?$ [**1%**]

11. $13 \times 7 \div 7 = ?$ [**1%**]

12. $42 \div 6 \times 7 = ?$ [**1%**]

13. $3 \times 5 + 7 = ?$ [**1%**]

14. $9 \times 4 - 6 = ?$ [**1%**]

15. $4 \times 8 + 20 - 15 = ?$ [**1%**]

16. Which digit is in the hundreds place in the number 1729? **[2.0%]**

    1729 的百位是哪一個數字？

17. Janice is facing the south. The _____ is on her right. **[2.1%]**

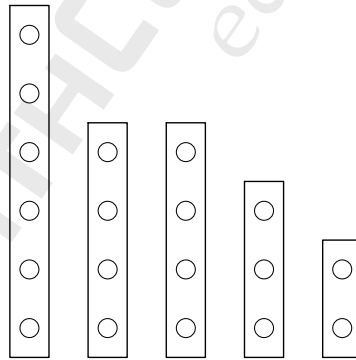   小思面向南方，她的右面是 _____ 方。

18. Find the missing number. **[2.2%]**

    找出橫線上的數字。

    $$10 \text{ m } 7 \text{ cm} = \underline{\hspace{3cm}} \text{ cm}$$

19. Which four-sided shape can be made by using the following geo-strips? **[2.3%]**

    利用以下的幾何條可砌出哪個四邊形？

20. Mom went groceries shopping. She bought a steak at 59 dollars and 90 cents which **[2.4%]** was 9 dollars and 90 cents cheaper than the original price. Find the original price of the steak.

    媽媽到街市買菜，她用 59 元 9 角買了一塊牛扒，比原價便宜了 9 元 9 角，牛扒的原價是多少元多少角？

21. Anson and his 4 friends each ate 5 pieces of chicken nuggets. How many pieces of chicken nuggets did they eat altogether? **[2.5%]**

小新和 4 個朋友每人吃了 5 件雞塊，他們共吃了多少件雞塊？

22. How many days are there in the February of 2017? **[2.6%]**

在 2017 年的二月有多少日？

23. Find the missing number. **[2.7%]**

找出橫線上的數字。

$$\underline{\quad ? \quad} \times 8 = 72$$

24. A movie theater sold 328 tickets in the morning. The number of tickets sold in the afternoon is 168 more than in the morning. How many movie tickets are sold in the whole day? **[2.8%]**

戲院在早上售出了 328 張戲票，下午比早上多售出了 168 張戲票。問戲院全日售出了多少張戲票？

25. _____?_____ prism has 7 faces. **[2.9%]**
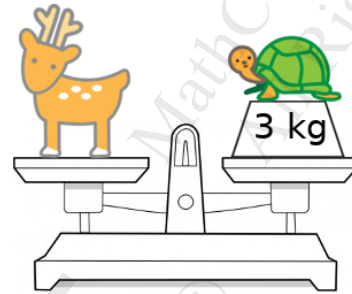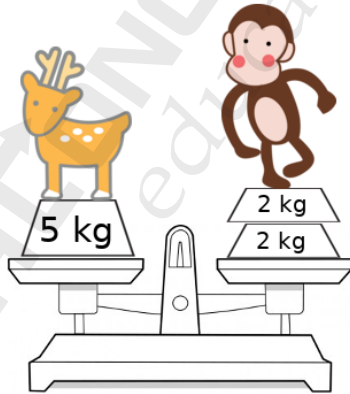
_____?_____ 柱體有 7 個面。

26. Veronica has 5 piano lessons every month. How many piano lessons did she have from April to November? **[3.0%]**

郎怡每個月都上 5 堂鋼琴課。由四月到十一月她上了多少堂鋼琴課？

27. If the monkey weighs 38 kg, then how much in kilograms does the turtle weigh?   [**3.1%**]

如果猴子重 38 公斤，則烏龜重多少公斤？

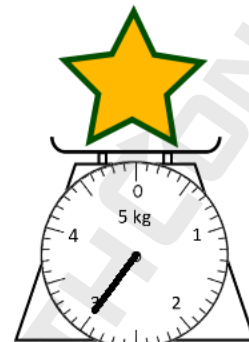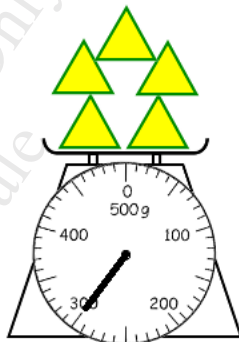28. A pencil costs 9 dollars. Ross has 59 dollars. How much more money does he need   [**3.2%**] to buy 7 pencils?

一支鉛筆售價 9 元，羅斯有 59 元。他還欠幾元才能買 7 支鉛筆？

29. A gift can be redeemed at 10 stamps. Leo can only redeem 9 gifts. Leo has at most   [**3.3%**] ____?____ stamps.

集齊 10 個蓋章可以換取一份小禮物，俊俊現在可換取 9 份小禮物。俊俊最多已集齊蓋章 ____?____ 個。

30. A star is heavier than a triangle by ____?____ grams.   [**3.4%**]

一個星形比一個三角形重____?____克。

31. Find the missing number. **[4.0%]**

    找出橫線上的數字。

    $$31 , 32 , 35 , \underline{\quad ? \quad} , 47 , 56 , 67 , 80 , \ldots$$

32. Evaluate $17 - 18 + 19 - 20 + 21 - 22 + 23 - 24 + 25 - 26 + 27$. **[4.1%]**

    計算 $17 - 18 + 19 - 20 + 21 - 22 + 23 - 24 + 25 - 26 + 27$。

33. Each letter represents a digit. Find the value of A. **[4.2%]**

    如果每個英文字母代表一個數字，A 的數值是多少？

    $$
    \begin{array}{ccc}
      & 6 & A & 1 \\
    - & & 8 & B \\
    \hline
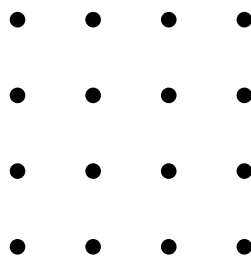   & C & C & C \\
    \end{array}
    $$

34. A photo album has 60 pages. Each page has 2 photos. Jeff takes out one photo on **[4.3%]** each page from page 30 to page 60. How many photos are left in the album?

    一本相簿有 60 頁，每頁有 2 張照片。小夫從第 30 頁至第 60 頁的每頁都拿走一張照片，問相簿裡還有多少張照片？

35. How many squares can be drawn by connecting the given dots below? **[4.4%]**

    下圖可以連出多少個正方形？

36. Alan is building one side of a fence that is 90 meters long. If Alan has 10 fence posts **[4.5%]** and every two adjacent fence posts must be in fixed distance, how far apart in meters are every two adjacent fence posts?

阿倫有 10 條木柱，他想用這些木柱製作一面長 90 米的圍欄。如果每兩條木柱之間的距離都相同，問這個距離是多少米？

37. Form two 2-digit odd numbers from 1, 2, 3, 4, 6, and 7. The digit cannot be repeated. **[4.6%]** What is the greatest difference between the two odd numbers?

從 1、2、3、4、6 和 7 中選 4 個數字來組成 2 個兩位單數，數字不可以重複使用。這兩個兩位單數之差最大是多少？

$$\boxed{}\boxed{} - \boxed{}\boxed{} = \underline{\quad ? \quad}$$

38. What is the ones digit of $1997 + 1998 + 1999 + \cdots + 2016 + 2017$? **[4.7%]**

$1997 + 1998 + 1999 + \cdots + 2016 + 2017$ 的個位數字是甚麼？

39. What is the most number of intersections that can be formed by 6 straight lines? **[4.8%]**

六條直線最多可形成多少個相交點?

40. Three men are sitting on a bench. Their names are Mr Truth (always telling the **[4.9%]** truth), Mr Lie (always lying), and Mr Wisdom (sometimes lying). You asked the one on the left: "Who is sitting next to you?"

"Mr Truth," he replied.

Then you asked the one in the middle: "What is your name?"

"Mr Wisdom."

Finally, you asked the one on the right: "Who is your neighbor?"

"Mr Lie." He answered.

Please identify their name from left to right. (Only write one letter from A to F)

長凳上坐了三個人，他們的名字是誠實先生（必定講真話）、大話先生（必定講假話）及狡猾先生（時真時假）。你從最左面的人問起：「坐在你旁邊的是誰？」

「誠實先生。」他回答。

然後你問中間的人：「你又是誰？」

「狡猾先生。」

最後，你問最右面的人：「你旁邊坐著誰？」

「大話先生。」他回答。

現在請你由左至右分辨他們的名字。（A 至 F 選一個）

    A. Mr Truth, Mr Lie, Mr Wisdom; 誠實先生、大話先生、狡猾先生

    B. Mr Truth, Mr Wisdom, Mr Lie; 誠實先生、狡猾先生、大話先生

    C. Mr Lie, Mr Wisdom, Mr Truth; 大話先生、狡猾先生、誠實先生

    D. Mr Lie, Mr Truth, Mr Wisdom; 大話先生、誠實先生、狡猾先生

    E. Mr Wisdom, Mr Truth, Mr Lie; 狡猾先生、誠實先生、大話先生

    F. Mr Wisdom, Mr Lie, Mr Truth; 狡猾先生、大話先生、誠實先生

End of paper

Name _____

Reg No ☐☐☐☐☐ – ☐☐ – ☐☐☐

ANSWER SHEET

1) **52**	11) **13**	21) **25**	31) **40**
2) **75**	12) **49**	22) **28**	32) **22**
3) **45**	13) **22**	23) **9**	33) **4**
4) **15**	14) **30**	24) **824**	34) **89**
5) **27**	15) **37**	25) **Pentagonal / 五角**	35) **20**
6) **2060**	16) **7**	26) **40**	36) **10**
7) **24**	17) **West / 西**	27) **34**	37) **54**
8) **0**	18) **1007**	28) **$4**	38) **7**
9) **3**	19) **Trapzoid / trapezium / 梯形**	29) **99**	39) **15**
10) **8**	20) **$69.8**	30) **2940**	40) **F**