Contents

4A

Sample

Visit www.popularlearning.com.hk for Solution PowerPoints on challenging questions.

Make your choice

Write down the letter of the correct answer in the 🍥.

1. $149 \times 29 = ?$

   A. 241　　　　　　B. 3980　　　　　　C. 4321　　　　　　D. 5627

2. A hot water bottle costs $158 and a department store sold 2 dozen of them today. How much did it receive?

   A. $316　　　　　　B. $2212　　　　　　C. $3160　　　　　　D. $3792

3. There are 172 coaches in a parking lot. Each coach can carry 58 passengers. How many passengers can all of the coaches in the parking lot carry?

   A. 9976　　　　　　B. 8600　　　　　　C. 4676　　　　　　D. 4176

4. Janet has $36 of pocket money every day. How much pocket money does she get in total in February of a leap year?

   A. $1008　　　　　　B. $1044　　　　　　C. $1080　　　　　　D. $1116

5. The hair dryer on the right is selling at $267 each. The owner of a hair salon wants to buy 12 hair dryers. How much should the owner pay?

   A. $2403　　　　　　B. $2937

   C. $3204　　　　　　D. $3471

   Buy 3 Get 1 Free

6. Each set of summer uniform or winter uniform costs $257. Class 4A has 37 students, and every student has to buy one of each of the two sets of uniforms. How much should they pay in total?

   A. $514　　　　　　B. $7710　　　　　　C. $9509　　　　　　D. $19 018

7. The ticket prices of a show are $30 for adults and $15 for children. If there are 152 audience, at most how much can the organizer receive?

   A. $450　　　　　　B. $2280　　　　　　C. $4560　　　　　　D. $6840

? Thinking Zone

Answer the following questions.

8. A fastfood restaurant opens for 16 hours every day.

   (a) The fastfood restaurant opens for _____ hours every common year.

   (b) The fastfood restaurant sold 880 hamburgers on Wednesday. It received a total of $_____ .

   (c) Tuesday is the anniversary day of the school. Miss Chan orders 350 hamburgers for refreshment. How much should she pay? (Show your working)

Fun Fun Fastfood

Special Hamburger

$15 each
$2 off on Wednesdays

9. The ticket price of a carnival is $485 each.

   (a) Class 4B has 32 students. Two teachers, Mr. Chan and Mr. Wong, take the class to the carnival. They need to pay $_____ for the tickets in total.

   (b) 28 students from Class 4C went to the carnival. They had lunch in a restaurant in the carnival for $45 each. How much did they spend in total? (Show your working)

10. A tricycle has three identical wheels. The tricycle travels 95 cm when the wheels rotate once. Fanny rode the tricycle and the three wheels each rotated 180 times. The tricycle travelled a total distance of _____ m.
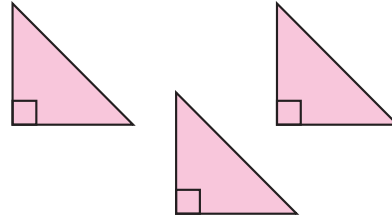
Make your choice

Write down the letter of the correct answer in the ◌.

1. Among the common multiples of 6 and 7, which one is closest to 100?

   A. 42   B. 84   C. 105   D. 126

2. The three identical right-angled isosceles triangles on the right can be put together to form which kind of the following quadrilaterals?
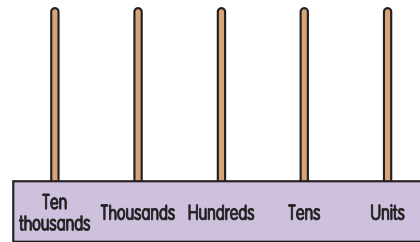
   A. Rectangle   B. Parallelogram   C. Rhombus   D. Trapezium

3. Which of the expressions below gives a result closest to 2000?

   A. 38×42 B. 61×29 C. 196×8 D. 391×5

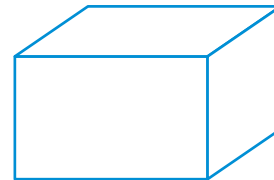4. What is the largest 5-digit odd number that can be shown with 8 beads on the abacus on the right?

   A. 80 001   B. 70 001
   C. 41 111   D. 10 007

   Ten thousands Thousands Hundreds Tens Units

5. Father is driving due west after turning right in a road junction. Due which direction was he driving before the turn?

   A. East   B. South   C. West   D. North

6. How many pairs of parallel lines are there in the figure on the right ?

   A. 3 pairs   B. 6 pairs
   C. 9 pairs   D. 12 pairs

7. Places A and B are 328 m apart. Places B and C are 328 m apart. Places A and C are 525 m apart. Calvin walked back-and-forth between A and C through B once. What was the total distance he covered?
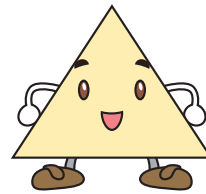
   A. 656 m   B. 853 m   C. 1050 m   D. 1312 m

8. Which of the following is incorrect?

   A. All triangles have obtuse angles.

   B. All triangles have acute angles.

   C. No triangle has 3 obtuse angles.

   D. A triangle has at least 2 acute angles.

9. A number has six factors, in which 1, 2, 4, 16 and 32 are five of them. What is the remaining factor?

   A. 3   B. 6   C. 8   D. 12

10. A rhombus can be cut into two triangles of what type?

    I.   Equilateral triangle

    II. Scalene triangle
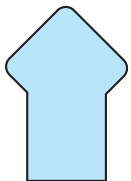
    III. Isosceles triangle

    A. I and II only   B. I and III only

    C. II and III only   D. I, II and III

11. $36 \times 25 \times 30 = ?$

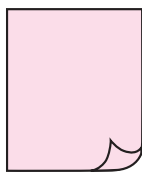   A. 2700   B. 7200   C. 24 000   D. 27 000

12. Which of the following shapes has most pairs of parallel lines?

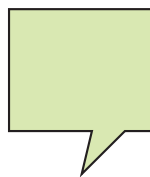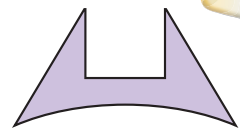   A.   B.   C.   D.

13. The largest factor of a number is 30. The second multiple of another number is 90. What are the L.C.M. and the H.C.F. of these two numbers?

	L.C.M.	H.C.F.
A.	90	30
B.	90	15
C.	180	30
D.	180	15

? Thinking Zone

Answer the following questions.

14.

Shop A

Interest Free Instalments

Monthly Payment $325

12 Payments

Shop B
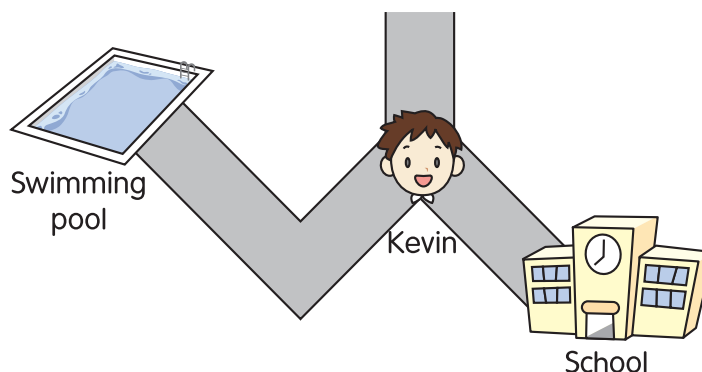
Interest Free Instalments

18 Monthly Payments at $225

First month payment holiday for members

(a) Father is a member of shop B. How much shoud he pay for a mobile phone at shop B? (Show your working)

(b) It would be cheaper for Father to buy his mobile phone at ✪ shop A / shop B .

✪ *Circle the answer*

15. The school is to the south of Kevin.

Swimming pool

Kevin

School

(a) Kevin is going to swim at the swimming pool. He should turn _____ first (direction) and then turn _____. (direction)

(b) After swimming, Kevin needs to pick up his brother at school. He should turn _____ first, then turn _____ and finally turn _____ to arrive at the school. (direction)   (direction)   (direction)
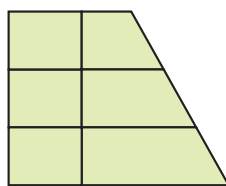
16. A fresh juice shop has opened for less than 100 days. The sales each day was less than 1000 cups. The total sales since the opening has reached a 5-digit number.

(a) At most how many cups of fresh juice have been sold in the shop since its opening? (Show your working)

(b) The shop has sold at most _____ cups of fresh juice since its opening. (In words)

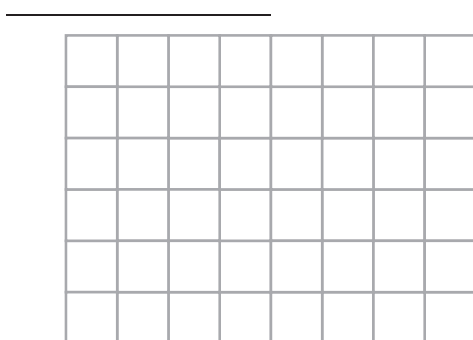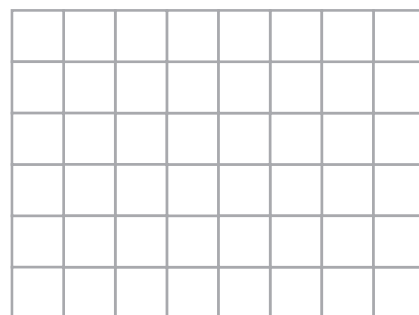(c) The juice is selling at $15 each. The shop receives at most $_____ each day.

17.

(a) The figure above has _____ pair(s) of parallel lines and _____ pair(s) of perpendicular lines.

(b) The figure above has _____ acute angle(s) and _____ obtuse angle(s).

(c) The above figure has _____ trapezium(s).

Draw the quadrilaterals described below on the grid papers and write down the names of the quadrilaterals on the ____.

18. (a) 4 equal angles and 4 equal sides. _____

(b) 4 unequal sides with parallel opposite sides. _____

Splendid Olympiad Skills

🚀 Mysterious expressions

Professor, Mother gave me an expression of vertical addition. How can I know the numbers that A, B and C stand for?

$$\begin{array}{r} A \\ A\ B \\ +\ A\ B\ C \\ \hline 6\ 2\ 8 \end{array}$$

Abby, such **mysterious expressions** must be solved step by step with patience. Sometimes we need to make some assumptions as well. You will get it after studying the following explanation.

$$\begin{array}{r} A \\ A\ B \\ +\ \boxed{A}\ B\ C \\ \hline \boxed{6}\ 2\ 8 \end{array}$$

① First consider the hundreds place.
➡ If there is no carrying from the tens place, A is 6.
➡ If there is a carrying from the tens place, A is 5.

When A is either 5 or 6, there must be a carrying of 1 from the tens place, so that the digit in the tens place of the result is 2. Therefore, A is 5.

$$\begin{array}{r} 5 \\ \boxed{5}\ B \\ +\ 5\ \boxed{B}\ C \\ \hline 6\ \boxed{2}\ 8 \end{array}$$

② Then consider the tens place.
➡ If there is no carrying from the units place,
   5 + B = 12, B is 7.
➡ If there is a carrying from the units place,
   5 + B + 1 = 12, B is 6.

When B is either 6 or 7, there must be a carrying of 1 from the units place, so that the digit in the units place of the result is 8. Therefore, B is 6.

$$\begin{array}{r} \boxed{5} \\ 5\ \boxed{6} \\ +\ 5\ 6\ \boxed{C} \\ \hline 6\ 2\ \boxed{8} \end{array}$$

③ Finally consider the units place.
➡ 5 + 6 + C = 18. Therefore, C is 7.

There is no fixed rule on the order of the places to be considered. It depends on the numbers in the expressions.

Mathematics Skills Booster
Mock Test (4A)

Date: _____

Marks: _____

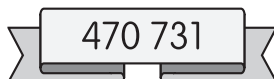**Student Name:** _____ **Class:** _____ **Student No. :** _____

Part A (60 Marks)

Write down the letter of the correct answer in the ⬜.

1. A charity group raised twenty thousand and four hundred dollars from raffle ticket sales and thirty thousand dollars from a charity auction. How much was raised in total?
   A. $20 400　　　B. $24 000　　　C. $50 400　　　D. $54 000

2. In the number, what is the difference between the values of the two '7's?

470 731

   A. 6300　　　　B. 63 000　　　C. 69 300　　　D. 693 000

3. How many common factors of 6 and 9 are there between 100 and 150?
   A. 2　　　　　　B. 3　　　　　　C. 4　　　　　　D. 5

4. If A is the H.C.F. of B and C, which statement below is incorrect?
   A. A is a factor of B.　　　　　　B. C is a multiple of A.
   C. A must be smaller than B.　　　D. A cannot be greater than C.

5. How many minutes does it take to travel from Hong Kong to Beijing by through train?

Through Train Ticket	
Hong Kong →	Beijing
Departure	Arrival
07/12/2012	08/12/2012
20:00	20:00

   A. 240 minutes　　B. 480 minutes
   C. 960 minutes　　D. 1440 minutes

6. The product of a number and 36 is equal to 72 times 36. What is the number?
   A. 36　　　　　　B. 72　　　　　　C. 108　　　　　D. 2592

7. What is an approximate result of 399×61?
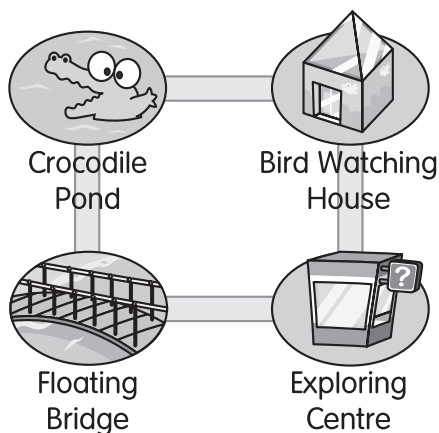   A. 1800　　　　　B. 2400　　　　　C. 18 000　　　　D. 24 000

Part B (40 Marks)

Answer the following questions.

31. The admission fees of Bay Park are as follows:

Group size (number of people)	Admission fee (dollars)	
	Adult	Child (3 to 17 years old) /Student
20 – 29	26	13
30 – 49	24	12
50 or above	21	11

(a) 125 students from primary 4 join a one-day tour to Bay Park. They have to pay $_____ in total for admission. [2 marks]

(b) The total number of visitors to Bay Park last month was the smallest 5-digit even number formed by 3, 1, 5, 2 and 0. The total number of visitors was _____. [2 marks]

(c) A total of 138 students and teachers are going to join the one-day tour. If each coach can carry 48 passengers, at least how many coaches do they need to rent? (Show your working) [4 marks]

32. The following shows the floor plan of Bay Park.

Crocodile Pond

Bird Watching House

Floating Bridge

Exploring Centre

(a) If Floating Bridge is on the east of Exploring Centre, then Crocodile Pond is on the _____ of Floating Bridge. [2 marks]

(b) Fanny looks out to the _____ from Bird Watching House and sees Exploring Centre. She looks out to the east and sees _____. [4 marks]