

Contents

2A

1. 3-digit numbers	2
2. Addition (I)	4
3. Addition (II)	6
4. Length and distance (Revision)	8
5. Metre and centimetre	10
6. Angles and right angles	12
7. Subtraction	14
8. Problems on addition and subtraction	16
9. 3-D shapes (Revision)	18
10. Prisms and pyramids	20
All-round Booster I	22
11. Introduction to multiplication	26
12. Multiplication of 2, 5 and 10	28
13. Multiplication of 4 and 8	30
14. Multiplication of 3 and 6	32
15. Multiplication of 7 and 9	34
16. Wonders of multiplication	36
17. Problems on multiplication	38
18. Time (I)	40
19. Time (II)	42
20. Year, month and day	44
All-round Booster II	46
Splendid Olympiad Skills	50



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. Which 3-D shape below does not have a quadrilateral face?

- A. Triangular prism
- B. Cone
- C. 5-sided prism
- D. 4-sided pyramid


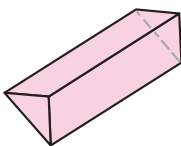
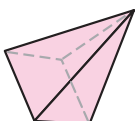
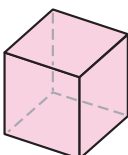


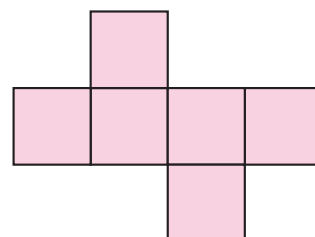
2. How many faces does a 5-sided prism have?

- A. 5
- B. 6
- C. 7
- D. 10



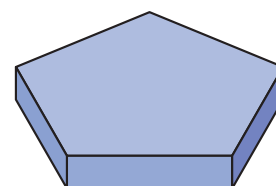
3. The net on the right can form which one of the following 3-D shapes?

- A. 
- B. 
- C. 
- D. 



4. What kind of 3-D shape is the one on the right?

- A. 4-sided prism
- B. 5-sided prism
- C. 6-sided prism
- D. 6-sided pyramid

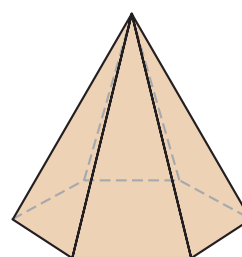


5. It needs how many plastic sticks and plastic balls to make a 6-sided pyramid?

No. of plastic sticks

No. of plastic balls

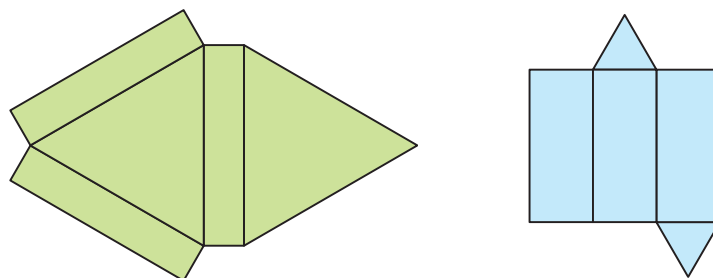
- | | | |
|----|----|---|
| A. | 12 | 7 |
| B. | 12 | 6 |
| C. | 18 | 7 |
| D. | 18 | 6 |



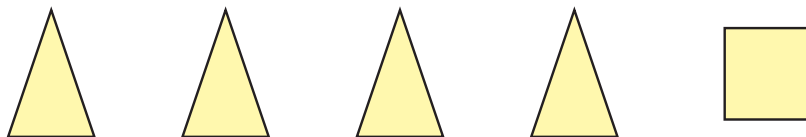


Answer the following questions.

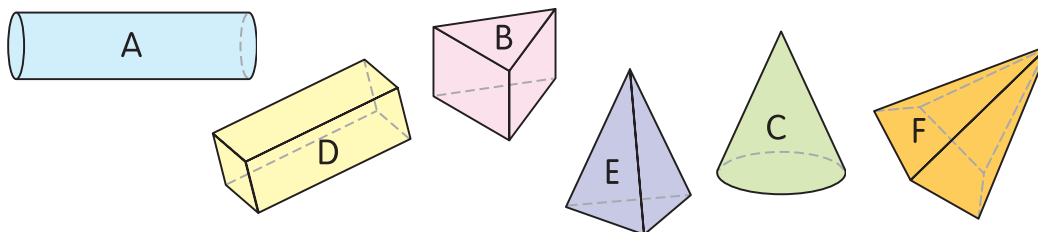
6. Jean cuts papers to get the following two nets and then folds them into 3-D shapes.



- (a) Both nets can form 3-D shapes of _____.
- (b) Besides the bases, each 3-D shape formed has _____ face(s) which are all _____.
7. Willy draws the faces of a biscuit box as follows.



8. Below are some 3-D shapes.



- (a) There is/are _____ prism(s) above.
- (b) 10 plastic sticks and 6 plastic balls can form the 3-D shape _____.
- (c) The bottom faces of 3-D shapes _____ and _____ are circles.



Make your choice

Write down the letter of the correct answer in the .

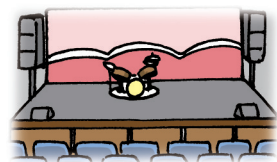
1. Paradise Park received 45 complaint letters last year, in which 38 were handled. It received 17 fewer complaint letters this year. How many complaint letters did it receive this year?

A. 7 B. 21 C. 24 D. 28



2. A concert has 650 seats. It is so popular that the organizer adds 185 standing spaces and 136 seats. How many seats does the concert have now?

A. 321 B. 786 C. 835 D. 971

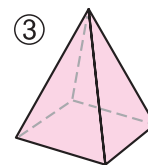
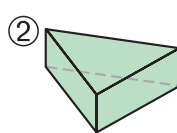
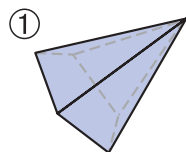


3. 3, 5 and 8 can form how many 3-digit numbers between 380 and 580?

A. 2 B. 3 C. 4 D. 6



4. Which 3-D shape(s) below has/have 5 faces?



A. ① only B. ② only C. ② and ③ only D. ①, ② and ③

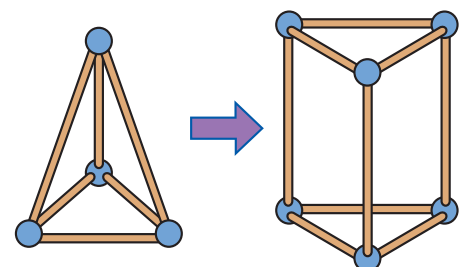
5. Jenny breaks a triangular pyramid to get the plastic sticks and plastic balls that are used to make the 3-D shape. She wants to make a triangular prism. How many more plastic sticks and plastic balls does she need?



No. of plastic sticks

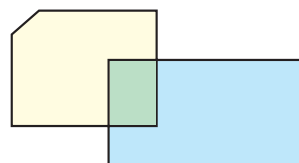
No. of plastic balls

- | | | |
|----|---|---|
| A. | 3 | 2 |
| B. | 3 | 3 |
| C. | 6 | 4 |
| D. | 6 | 9 |



6. How many right angles are there in the figure on the right?

A. 7 B. 11
C. 13 D. 15



7. In a fruit store, there are 133 more oranges than apples, and 89 more apples than pears. How many more oranges than pears are there?

A. 44 B. 212 C. 222 D. 311



8. Father's steps are 45 cm wide and Uncle's steps are 42 cm wide. They each use their steps to measure the length of a jogging trail. Which of the following is correct?

A. Father takes more steps than Uncle.
B. Uncle takes more steps than Father.
C. They take the same number of steps.
D. Father's steps are narrower than Uncle's.

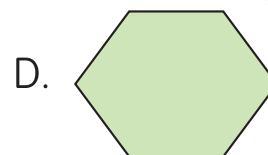
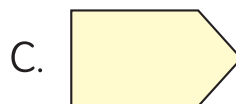
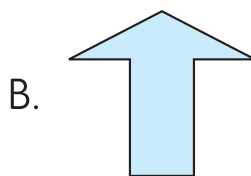
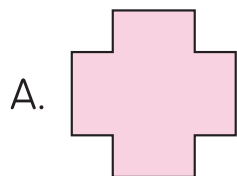


9. Kelly cuts away 105 cm of a rope and then cuts the remaining part into two equal halves. One of those halves is 250 cm long. What is the length of the original rope?

A. 355 cm B. 5 m C. 605 cm D. 650 cm

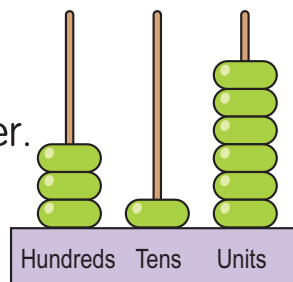


10. Which shape below does not have any right angle?



11. Rearrange the beads on the abacus on the right to show the smallest 3-digit even number. What is that number?

A. 109 B. 118
C. 190 D. 208





Answer the following questions.

12. Below are 3 set dinners in a Japanese restaurant.



- (a) The restaurant sold 648 fried rice sets last week, which was 195 fewer than sushi sets, but 87 more than soup noodle sets. How many sushi sets did the restaurant sell last week? (Show your working)

- (b) Each sushi set costs _____ dollars more than each soup noodle set.
- (c) Each customer who orders a set dinner has a 'scratch-and-win' card. If one scratches to get a 3-digit even number with 9 in the hundreds place and the same digit in the tens and units places, he will win a gift. There are _____ number(s) that can match this rule.

13. Brother goes to Surf Park with friends. He takes a total of 95 portraits and scenery photographs.

- (a) Brother takes 28 scenery photographs and _____ portraits.
- (b) Brother deletes 19 poorly shot portraits. How many scenery photographs and portraits does he have in total? (Show your working)



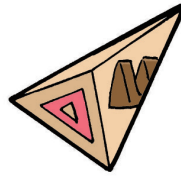
14. Below are some items selling in a supermarket.



Tea leaves



Cookies



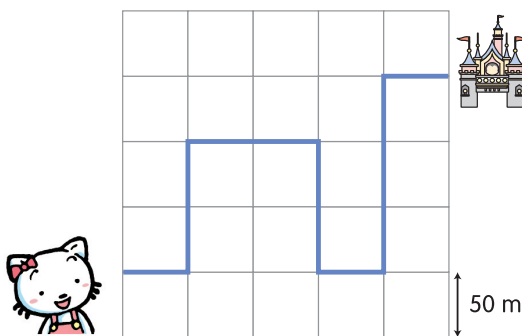
Chocolates



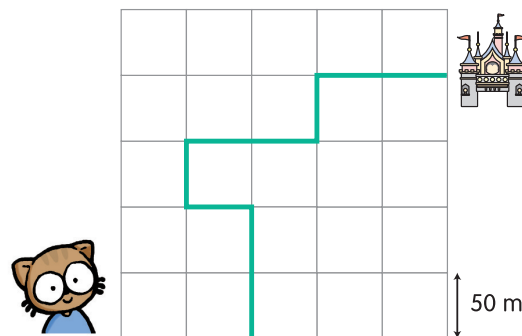
Ice cream

- (a) Mother buys one of the items above. The box of that item has 2 bottom faces and it can roll. Mother buys some ☆ tea leaves / cookies / ice cream . ☆ Circle the answer
- (b) Marlene can get 4 shapes of _____ from the chocolate box if she cuts along the creases.
- (c) Besides the bases, each other face of the cookie box has _____ right angles.
- (d) The supermarket has 102 boxes of chocolates remaining after selling 196 boxes last month. The supermarket had _____ boxes of chocolates originally.

15. Below are the paths Toto and Tata take to go to the castle.

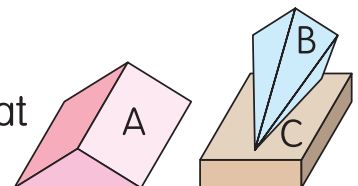


Toto



Tata

- (a) ☆ Toto / Tata takes a shorter path. ☆ Circle the answer
- (b) Count in groups of 50. Toto's path is _____ m long.
- (c) The shapes on the right are some of the building materials of the castle. 3-D shape A is a _____, which has _____ face(s) that is/are _____ besides the bases.








Splendid Olympiad Skills

Sample

Pattern of shapes






Professor, based on the pattern below, do you know which smiling faces should be in the blanks?

?		?
		
	?	?

Casey, it is not hard to solve this problem. All you need to do is carefully find the **pattern of the shapes**.



- ① First of all, take notice that the smiling faces above have different shapes of faces and eyes but the same mouth. So you only need to consider the faces and the eyes.
- ② Next, take notice that the shapes of the faces and the eyes include , , and .
- ③ Now consider the faces. The shapes of the faces do not repeat in rows and columns. Then consider the eyes. The shapes of the eyes do not repeat in rows and columns too.
- ④ Finally, take notice that all the smiling faces are different.

Mathematics Skills Booster

Mock Test (2A)

Date : _____

Marks: _____

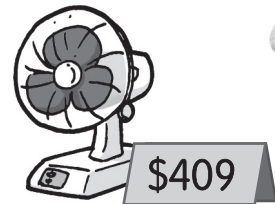
Sample

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

Part A (60 Marks)

Write down the letter of the correct answer in the .

1. A staff of an appliance store marks the price tag of a fan incorrectly. The price on the tag is 58 dollars cheaper than the actual price. What is its actual price?




A. 351 dollars B. 457 dollars C. 467 dollars D. 525 dollars

2. An encyclopaedia costs 279 dollars, which is 107 dollars cheaper than a dictionary. Mr. Chan buys one of each. How much should he pay?

A. 386 dollars B. 493 dollars C. 665 dollars D. 772 dollars

3. The table below shows the result of a competition. Part of the score of Group A is missing. If Group A gets the lowest score which is odd, what is the score of Group A?

- A. 540 points
B. 541 points
C. 542 points
D. 545 points

Mathematics Competition	
Group	Score (points)
A	54 
B	769
C	543

4. Which number below is the largest 3-digit even number?

- A. Nine hundred and ninety nine
B. Nine hundred and ninety eight
C. Nine hundred and ninety
D. Nine hundred and eighty eight

5. $168 + 355 + 412 = ?$

A. 935 B. 925 C. 835 D. 825

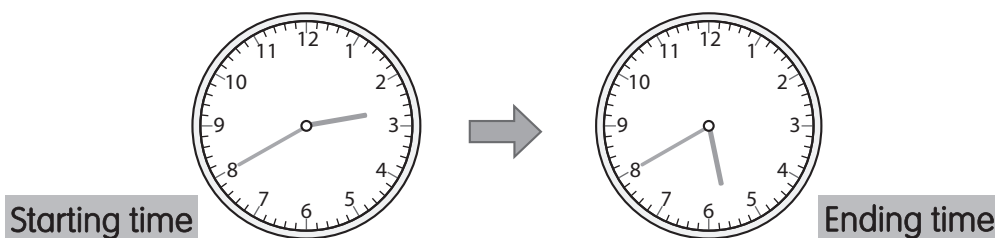
Part B (40 Marks)**Answer the following questions.**

31. Galvin has the following 5 number cards.



- (a) He uses 3 of the number cards to form the largest 3-digit odd number. He forms the number _____. [2 marks]
- (b) He uses 3 of the number cards to form the smallest 3-digit odd number. He forms the number _____. [2 marks]
- (c) What is the sum of the two 3-digit numbers he forms above? (Show your working) [4 marks]

32. Sister practises the piano during the following time every day.



- (a) Sister starts practising at _____ : _____ in the _____ every day. [2 marks]
- (b) How many hours does Sister practise the piano for every week? (Show your working) [4 marks]