

Division

P

Year 3

**MALAYSIA ASEAN
MATH OLYMPIADS
2014 CONTEST**



Full Name:

Year:

Date:

Time:

School Name:

School Code:

Rules and Regulations

(Please read these rules and regulation carefully)

1. Please fill in your **FULL name** correctly, school name, school code and the date and time of contest clearly in the spaces above. Those who do not fill in the required particulars will be disqualified automatically.
2. Do not open the question booklet until you are told to do so. You may only use **2B** pencil when answering the questions.
3. No calculators and any unauthorised electronic devices (including mobile phones) are allowed during the contest.
4. Strict silence must be observed at all times in the examination hall and please be reminded that you **MAY NOT** leave your seat without permission.
5. If you have any request or enquiry, please raise your hand and wait for an invigilator.
6. Only one candidate is allowed to leave the hall at a time. You are required to return to the hall within 10 minutes or else you will automatically be disqualified from the contest.
7. Each question in the contest have been verified by experienced trainers, thus no further explanation will be given.
8. The time allowed for the paper is **90 minutes**. You must stop writing when you are told to do so.
9. You **MUST** fill in your answer in the answer sheet provided in second page of the question booklet. You will not be awarded marks for any answer written in the question booklet.
10. Please be reminded that this is a contest and not an examination, try your level best to answer all questions within the prescribed time.
11. **Please tear off the answer sheet carefully and returned to invigilator along with contest paper. Participant only can bring back the contest papers on next week.**

Scoring System

1. The correct answer to each problem will be awarded one (1) point. However, you will NOT be penalised for each incorrect answer.
2. The organizer reserves the right to disqualified the event of malpractice to differentiate between those outstanding students.
3. Contestants or a team who are disqualified from the contest will be forfeited any right to re-sit this year.



<p style="text-align: center;"><i>Division</i></p> <p style="text-align: center;">P</p> <p style="text-align: center;">Year 3</p>	<h1 style="margin: 0;">2014</h1> <h1 style="margin: 0;">ANSWER SHEET</h1>	
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1		6		11		16		21	
2		7		12		17		22	
3		8		13		18		23	
4		9		14		19		24	
5		10		15		20		25	

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1 $17 \times \square + 50 - 5 \times 2 = 91$

What number should be filled in the box above?

2 $5, 4, 3, 2, +, =$

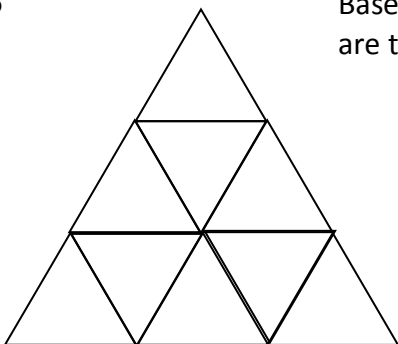
Using all the numbers and symbols above to make a summation equation, what is the biggest answer can be produced?

3 $2 + 4 + 6 + 8 + \dots + 50 = ?$

4 $1, 3, 5, 7$

What is the least common multiple for the above numbers?

5



Based on the diagram, how many triangles are there?

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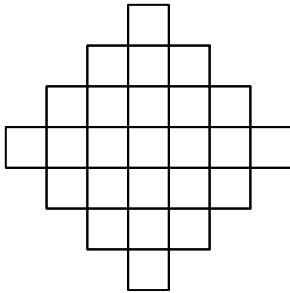
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- 6 Abby bought two and a half dozens of eggs with RM15. How much does an egg cost?

7 25, 26, 30, 39, A, 80, B
 $A + B = ?$

8



The diagram on left is formed by multiple squares with area of 16cm^2 each. What is the perimeter of the diagram?

- 9 1 foot = 12 inches, 1 inch = 3cm, 2.5 feet = ? cm

10

		a
	9	
		15

Each of the boxes on left should be filled with one number ranged from 1, 3, 5,... to 17, and each number can only be used once. If the sum of the each row, column and diagonal row is 27, find the number **a** on the top right corner.



11 Aaron has RM5 of pocket money everyday and his daily expenses is RM3.60. If he wanted to buy a book worth RM59, how many days should he be saving?

12 Jason wants to buy some drinks with RM60. The shopkeeper offer him RM2 each bottle of drink, and for every 4 empty bottles, he can get 1 drink for free.

How many bottles of drink can Jason get with RM60?

13 A shirt costs RM22, which is RM7 more expensive than a pair of shoes. The shoes are RM20 cheaper than a pant. Given that you have RM150, after buying a pair of shoes and 2 pants, how many shirt(s) can you buy?

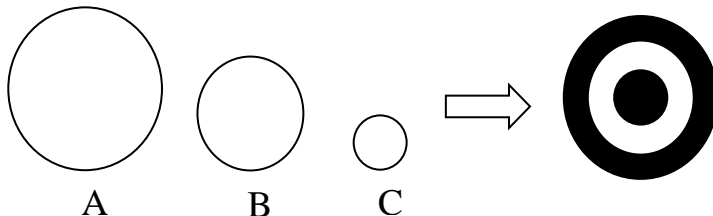
14 In a stationery shop, Alfred realized some relation between the retail prices of following items:

$$\text{Reference Book} + \text{Colour Pencil} = \text{RM22}$$

$$\text{Reference Book} + \text{Colour Pencil} + \text{Colour Pencil} = \text{RM27}$$

What is the difference in price between reference book and colour pencil?

15



The areas for diagram A, B and C are 22 cm^2 , $X \text{ cm}^2$ and 5 cm^2 respectively. By overlapping all three diagrams, the area of the darkened part is 17 cm^2 . Find X.

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16 A five-digit number is formed by using 0, 1, 2, 3 and 4.

Calculate the difference between the largest number and third smallest number that can be formed.

17 There are 30 students in a class. The number of boys is twice of the girls. The average weight of a boy and a girl is 34kg and 28kg respectively. Find the average weight of all students in the class.

18 Darren has tuition classes on every Monday, Wednesday and Friday. Given that the first day in March is Tuesday, how many days does Darren go to tuition classes in March?

19 Car A moves at the speed of 80km/h, while Car B is moving at 60km/h. Both cars depart from the same place and same time to the same destination. Car A departs at 12pm and arrives at 2pm. What is the arrival time for Car B?

20 Find the number of hours between 8 am on 27th February 2012 and 4 pm 3rd Mac 2012.

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21 Sharon, Catherine and Alfred are to be seated in a row of chairs labelled with A, B and C. How many different arrangements can be made?

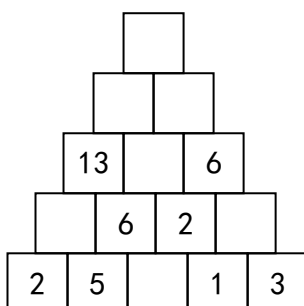
22 60 students were required to answer 2 questions. 40 students answered the first question correctly, 31 students answered the second question correctly and 4 students did not answer either of the two questions correctly. How many students answered both questions correctly?

23 An adult meal set has 2 burgers and 1 cup of Coke. A kids meal set consists of 1 burger and 1 cup of Coke. Johnson and his family ate 17 burgers and drank 12 cup of Coke.

How many kids meal sets had Johnson's family ordered?

24 There are 17 men and 15 women on a bus ride. At the first bus stop, 5 men and 2 women get off the bus and the number of men get on board is twice of women. At the second bus stop, 3 men and 2 women get off while 6 men and a woman get on board. There are 36 passengers in the bus now. Calculate the difference in the number of men and women passengers.

25



What number should be filled in the top column?