

Division

P

Year 4

ASIAN MATHS OLYMPIAD 2015 CONTEST



Full Name:

Class:

Date:

Time:

School Name:

IC. No:

Rules and Regulations

(Please read these rules and regulation carefully)

1. Please fill in your **FULL name** correctly, IC No, school name, class 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, do not expect to answer all types of questions.
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.**
12. **Please be reminded that if the contestants can't attend the contest, we don't accept any replacement contestants. If found any, the contestant will be disqualified automatically.**

Scoring System

1. For **Question 1- 10, 3 marks** will be awarded for each correct answer.
For **Question 11- 20, 4 marks** will be awarded for each correct answer.
For **Question 21- 25, 6 marks** will be awarded for each correct answer.
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.



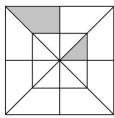
<i>Division</i> P Year 4	2015 ANSWER SHEET	
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1		6		11		16		21	
2		7		12		17		22	
3		8		13		18		23	
4		9		14		19		24	
5		10		15		20		25	

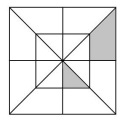


- 1 Calculate:
 $20.5 - 6.4 + 2.5 - 3.6 =$ _____ (3 marks)

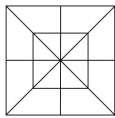
- 2 Observe the pattern of shaded region shown in graph 1,2 and 4 below , then draw the shaded region of graph 3



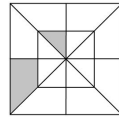
graph1



graph2



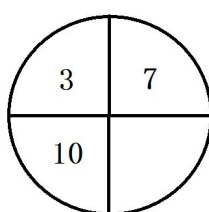
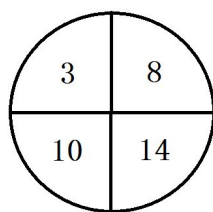
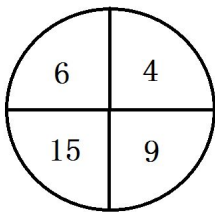
graph3



graph4

(3 marks)

- 3 Find pattern and fill in the blank. _____



(3 marks)

- 4 There are a total of 28 roosters and rabbits in a cage. there are 80 legs altogether, calculate the total numbers of roosters.

(3 marks)

- 5 Ali's height is measured 1.47 meter, he is 0.22 meter shorter then Benjamin. Whereas Calvin is 0.03 meter higher then Benjamin. Therefore, the height of Calvin is _____ meter.

(3 marks)

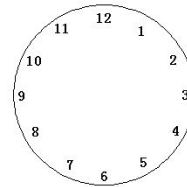


- 6 A rectangular land with length of 27 meter, width 5 meter. If a mango tree is planted in each three square meters, this land can plant a total of _____ mango trees.

(3 marks)

- 7 Draw a straight line within the surface of a clock to separate it into 2 portions. Summation of the numbers in one of the portion equal to 2 times the summation of the numbers in another portion. (There are more than one solutions, one just need to draw one of the lines)

(3 marks)



- 8 In the 5 equations A, B, C, D and E below, which one is **CORRECT**?

A: $\frac{7}{100} = 70\%$

B: $\frac{15}{20} = 0.75\%$

C: $\frac{2}{5} = 40\%$

D: $\frac{5}{20} = 55\%$

E: $\frac{1}{5} = 0.2\%$

(3 marks)

- 9 $A \div B = 12 \dots 4$, if A and B reduce 10 times at the same time, find the value of new quotient and remainder of the equation.

(3 marks)

- 10 1st of July 2014 is Tuesday, what day is 30th July 2014?

(3 marks)

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11 Calculate $1.25 \times 2.5 \times 0.5 \times 64 =$ _____

(4 marks)

12 A repeated sequence number 5.3168931689....., the 93rd number after the decimal point is _____

(4 marks)

13 5 kids (A, B, C, D and E) are playing games in the playground. In each round, they follow the rules below to pass on the toy on their hands to the next kid: $A \rightarrow C$, $B \rightarrow E$, $C \rightarrow A$, $D \rightarrow B$, $E \rightarrow D$. Initially, A and B are holding the car toy each while C, D and E holding motorcycle toy each. After five rounds, the kids with car toy are ____ and ____.

(4 marks)

14 A spider has 8 legs, a dragonfly has 6 legs. Given a number of spiders and dragonflies altogether have 420 legs, number of spiders are 3 times the number of dragonflies, the number of spiders are _____.

(4 marks)

15 The entrance ticket for a circus is 60 ringgit each, but a discount is offered for student group tickets. A school with 96 students has bought the group tickets and paid 4320 ringgit. In this case, each of the students has saved _____ ringgit.

(4 marks)

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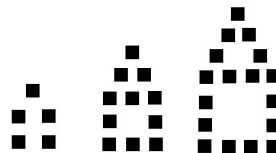
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- 16 Engineering team is working on a 9000 meter road and plan to complete it within 20 days. In actual works, they have to build extra 300 meter per day, so they can finished the works by _____ days earlier then they planned.
(4 marks)

- 17 In order to pack a group of hampers for souvenir giving ceremony, Asna alone needs 30 minutes to complete whereas Bakry alone needs 45 minutes to complete. If Asna and Bakry pack that group of hampers together, they will finish packing in _____ minutes.
(4 marks)

- 18 As shown in figures below, 5 stones are needed to build "house" number one, 11 stones are needed to build "house" number two, 17 stones will build "house" number three and so on. To build "house" number 30th, number of stones needed are _____. (4 marks)



- 19 Asmo is putting some ping pong balls into 10 boxes. In each of the boxes, number of ping pong balls shall not be less than 11, not equal to 17 and is not the multiple of 6. If the number of ping pong balls are different in each box, at least how many ping pong balls for Asmo to fill in all the 10 boxes?
(4 marks)

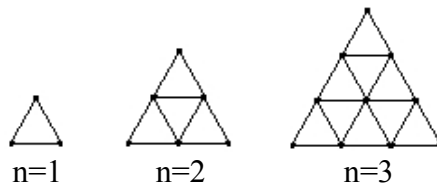
- 20 There are 30 pieces of 4 different colours but same size balls in a bag. Asmo is asked to take out balls from the bag with closed eyes. To guarantee the balls taken are not less than 5 same colour balls, at least how many balls should be taken out from the bag?
(4 marks)



- 21 There are playing cards with number "3", "4" and "5", 10 pieces each. Randomly select 8 pieces and their numbers sum up to 31; at most there are ____ pieces of "3" playing cards.

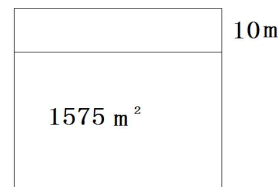
(6 marks)

- 22 One uses matches to form shapes as below. If one keeps on arranging in this pattern, one will need ____ matches to form the shape of $n = 9$, which has 9 matches at each sides.



(6 marks)

- 23 Within a square land, Asmo cut out a rectangular land with width of 10 meters (as shown below), the remaining land's area is 1575 square meters. The area of cut out rectangular land is ____ square meters. (6 marks)



- 24 Initially, school field is 50 meters length with 30 meters width. After expansion, the length increased by 20% and the area become 2340 square meters, therefore the width has increased ____ meters.

(6 marks)

- 25 A, B, C are in a contest. 400 officers are voting to support them and each of them can only cast one vote. If the ballot shows a result ratio of 2:3 for A and B candidates, 9:5 for B and C candidates, how many tickets had each of A, B and C get? A get ____, B get ____, C get ____.

(6 marks)