

Contest: Comprehensive Spatial Mental Inspection (COSMIC)

April 1, 2018 – June 20, 2018 11:59pm ET

Participants: 14

Test Designer: [James Dorsey](#)

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Contest Information

Cheating: Do not discuss answers/hints. *No time limit. Two attempts and reference aids* are allowed. *No penalty* for guesses/wrong answers.

Comprehensive Spatial Mental Inspection (COSMIC)

Observe the rotation and symmetry of the letters/numbers/symbols; for the solutions, use your keyboard – no drawing or software required!

I. Series

1. Complete the series:

. ? .~. .~.~ .~.~. .~.~.~

2. Complete the series:

? |||\\|
 |\\|
 //|
 |\\|
 |||\\|

3. Complete the series:

 + =
 ? =
+! ? +=
 =! +=
 +=!

II. Matrices

4. Find the missing element in this matrix:

< < >
/_ ?

5. Find the missing element in this matrix:

+ +- -
" ? ;

6. Find the missing element in this matrix:

. ' ' ,
% #% #
W VW V
/ ? \

III. Analogies

7. Complete the analogy:

' is to '' as : is to ?

8. Complete the analogy:

|v! : ^i :: |*H : ?
|!v i^ |H*
| | | |

9. Complete the analogy:

^ : <*o :: N : ?
* o*> +
o X

IV. Odd-One-Out

10. Select the letter (A, B, C, D, E, or F) of the item that is different from the others:

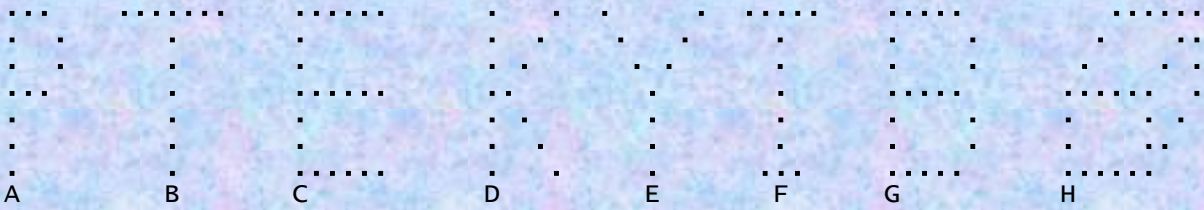
\\(o)) \\)o(\\(o) \\o(\\((o \\))o(
A B C D E F

11. Select the letter (A, B, C, D, E, F, or G) of the item that is different from the others:

 . . .
 . . .
\\
 . . .
 /

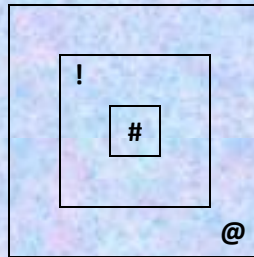
A B C D E F G

12. Select the letter (A, B, C, D, E, F, G, or H) of the item that is different from the others:

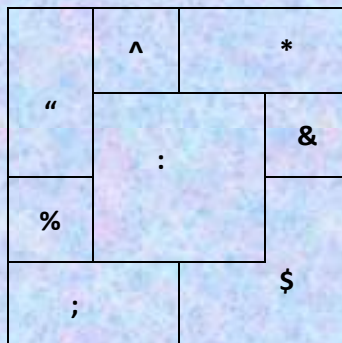


V. Problem Solving

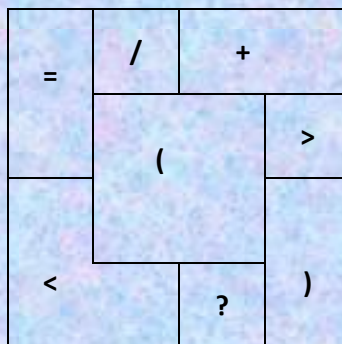
13. State the order that the following squares were put on top of each other:



14. State the order that the following overlapping same-sized squares were put on top of each other:



15. State the reverse order that the following overlapping same-sized squares were put on top of each other:



Final Scoreboard (June 20, 2018)

Ranking	Name	Country	1 st Attempt	2 nd Attempt	Mean Score	Prize
Winner	Tim Roberts	Australia	14	N/A	14	Free test submission and free society membership until September 30, 2018.
2 nd Place	Jawdat Wehbe Wehbe	Venezuela	12	14	13	Free test submission until August 31, 2018.
3 rd Place	Heinrich Siemens	Germany	12	N/A	12	50%-off test submission until July 31, 2018.
	Hidden	Hidden	11	13		
	Daniel Hilton	England	12	N/A		
	Nguyen Tran Hoai Thuong	Vietnam	12	N/A		
	Joseph Hayes	USA	12	N/A		
Jim Lorrimore	England	11	13			
David Quint	USA	11	13			
4 th Place	Tiberiu Sammak	Romania	11	N/A	11	Secret Prize: given to all participants
5 th Place	Nobuo Yamashita	Japan	9	N/A	9	
	Anfinn Bjartalíð	Faroe Islands	9	N/A		
	Alexandre Duran	Brazil	10	8		
6 th Place	Tonny Sellén	Sweden	8	N/A	8	