



## केन्द्रीय माध्यमिक शिक्षा बोर्ड

(मानव संसाधन विकास मंत्रालय, भारत सरकार, के अधीन एक स्वायत्त संगठन)

शिक्षा सदन, 17, इन्सटिट्यूशनल क्षेत्र, राउज एवेन्यु, दिल्ली-110002.

## CENTRAL BOARD OF SECONDARY EDUCATION

(An Autonomous Organization under the Union Ministry of Human Resource Development, Govt. of India)  
"Shiksha Sadan", 17, Institutional Area, Rouse Avenue, Delhi-110002



CBSE/ACAD./AD (R&I)/2015

December 14, 2015

Circular No. Acad. 85 -/2015

All Heads of Institutions affiliated to CBSE

### CELEBRATION OF GANIT (GROWING APTITUDE IN NUMERICAL INNOVATIONS & TRAINING) WEEK IN SCHOOLS AFFILIATED TO CBSE (16.12.2015 TO 22.12.2015]


*In order to commemorate the 128<sup>th</sup> birth anniversary of Dr. Srinivasa Aiyangar Ramanujan on 22<sup>nd</sup> December, 2015, the CBSE invites schools affiliated to it to celebrate GANIT (Growing Aptitude in Numerical Innovations & Training) Week. For this purpose, the schools may conduct the following activities during the GANIT week.*



#### Best Known For

- Landau–Ramanujan constant
- Mock theta functions
- Ramanujan conjecture
- Ramanujan prime
- Ramanujan–Soldner constant
- Ramanujan theta function
- Ramanujan's sum
- Rogers–Ramanujan identities
- Ramanujan's master theorem



**Dr. Srinivasa Aiyangar Ramanujan (1887-1920)**

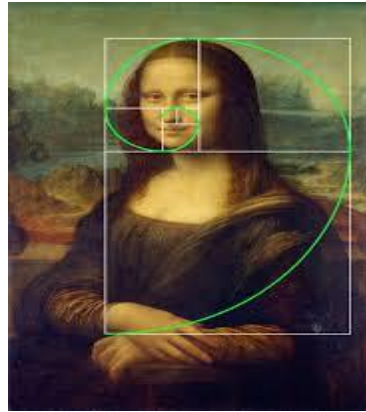
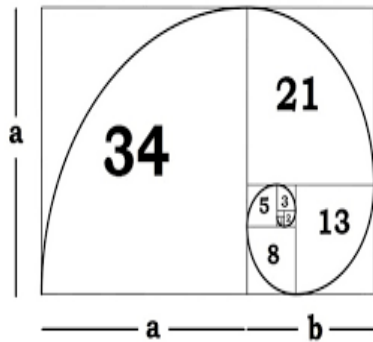
Date	Suggested Activity	Grade
16.12.2015	<p style="text-align: center;"><b>Mathematics Relay Race</b></p>  <p>In each grade, students may be divided in groups of 5-8 depending upon the class strength. A series of questions may be prepared and students may move ahead in the race only after solving those questions.</p>	I to V VI-VIII

17.12.2015	<p align="center"><b>Solving Mathematical Puzzles such as solving Rubik's cube and creating magic squares</b></p> <table border="1" data-bbox="347 271 703 613"> <tr><td>16</td><td>3</td><td>2</td><td>13</td></tr> <tr><td>5</td><td>10</td><td>11</td><td>8</td></tr> <tr><td>9</td><td>6</td><td>7</td><td>12</td></tr> <tr><td>4</td><td>15</td><td>14</td><td>1</td></tr> </table> <div data-bbox="751 421 1217 510" style="background-color: yellow; padding: 5px; text-align: center;"> <p>Interesting..... Isn't it?</p> </div>	16	3	2	13	5	10	11	8	9	6	7	12	4	15	14	1	VI to VIII																																																																																																																																
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18.12.2015	<p align="center"><b>Interactive Session on Mathematics</b></p>  <div data-bbox="751 703 1225 1039" style="background-color: yellow; padding: 5px;"> <p>Interactive activity-based sessions may be organized for students on various topics like Mathematics in nature, Mathematics in architecture, Pascal's triangle, Vedic Mathematics</p> </div>	IX to XII																																																																																																																																																
19.12.2015	<p align="center"><b>Quiz competition</b></p>  <div data-bbox="775 1122 1217 1464" style="background-color: yellow; padding: 5px;"> <p>Quiz competitions may be organized for each grade based on the various topics that they study in Mathematics</p> </div>	I to V VI to VIII IX to XII																																																																																																																																																
21.12.2015	<p align="center"><b>Mathematical games such as Sudoku and Kakuro</b></p> <table border="1" data-bbox="416 1552 767 1957"> <tr><td>○</td><td>2</td><td>3</td><td></td><td></td><td>1</td><td>7</td><td></td></tr> <tr><td></td><td></td><td>8</td><td>4</td><td>6</td><td></td><td></td><td>1</td></tr> <tr><td>9</td><td></td><td></td><td></td><td>5</td><td></td><td></td><td>4 8</td></tr> <tr><td>5</td><td>4</td><td>3</td><td></td><td></td><td></td><td></td><td>2 ○</td></tr> <tr><td></td><td>9</td><td></td><td>8</td><td>7</td><td></td><td>1</td><td></td></tr> <tr><td>1</td><td></td><td></td><td>○</td><td></td><td>4</td><td>9</td><td>5</td></tr> <tr><td></td><td>7</td><td></td><td></td><td></td><td>6</td><td>8</td><td>2</td></tr> <tr><td>8</td><td>1</td><td>7</td><td></td><td>2</td><td></td><td></td><td></td></tr> <tr><td></td><td>6</td><td></td><td></td><td>3</td><td>○</td><td></td><td>7 1</td></tr> </table> <p align="center">○ → 4 6 7 &amp; 8</p> <table border="1" data-bbox="804 1552 1155 1957"> <tr><td>6</td><td></td><td></td><td>2</td><td>5</td><td></td><td>4</td><td></td></tr> <tr><td>○</td><td>1</td><td>2</td><td></td><td></td><td>9</td><td></td><td>5</td></tr> <tr><td></td><td>9</td><td></td><td></td><td>4</td><td></td><td></td><td>8 7</td></tr> <tr><td></td><td>2</td><td></td><td>9</td><td>3</td><td></td><td>○</td><td>1</td></tr> <tr><td></td><td></td><td>8</td><td>1</td><td></td><td></td><td>7</td><td>3</td></tr> <tr><td>1</td><td>3</td><td></td><td></td><td></td><td>8</td><td>5</td><td></td></tr> <tr><td></td><td></td><td>6</td><td>3</td><td></td><td>4</td><td></td><td>2 ○</td></tr> <tr><td>5</td><td></td><td>○</td><td></td><td></td><td>7</td><td>9</td><td>6</td></tr> <tr><td>2</td><td>4</td><td></td><td></td><td>1</td><td></td><td></td><td>8</td></tr> </table> <p align="center">○ → 1 4 5 &amp; 8</p>	○	2	3			1	7				8	4	6			1	9				5			4 8	5	4	3					2 ○		9		8	7		1		1			○		4	9	5		7				6	8	2	8	1	7		2					6			3	○		7 1	6			2	5		4		○	1	2			9		5		9			4			8 7		2		9	3		○	1			8	1			7	3	1	3				8	5				6	3		4		2 ○	5		○			7	9	6	2	4			1			8	VI to VIII IX to XII
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22.12.2015

**Innovative Projects on Mathematics such as the Golden Ratio**

I to V  
VI to VIII  
IX to XII



**Conclude the week with an exhibition of all projects and activities taken up during the week**



These activities are suggestive in nature and the schools are encouraged to innovate and organize other similar activities. It is expected that such endeavours will reduce the fear of Mathematics and make its study more interesting amongst students.

The report of activities conducted by the schools during the **GANIT** week must be uploaded on the school's website and a short report (not exceeding 200 words) with photographs, highlighting the activities may be sent to **Ms. Gauri Nagpal, Assistant Professor and Assistant Director**, by e-mail at [ganitweek.cbse@gmail.com](mailto:ganitweek.cbse@gmail.com) or by post to CBSE, Shiksha Sadan, 17, Institutional Area, Rouse Avenue, New Delhi-110002.

**In case of any query, you may contact: [gauri.cbse@gmail.com](mailto:gauri.cbse@gmail.com) / 011-23231821.**

This may be brought to the notice of all teachers, students and parents to ensure wide participation.

*Sugandh Sharma.*

**Sugandh Sharma**  
**Additional Director (Innovation and Research)**

**Copy with a request to respective Heads of Directorates/KVS/NVS/CTSA as indicated below to also disseminate the information to all concerned schools under their jurisdiction:**

1. The Commissioner, Kendriya Vidyalaya Sangathan, 18-Institutional Area, Shaheed Jeet Singh Marg, New Delhi-110016.
2. The Commissioner, Navodaya Vidyalaya Samiti, B-15, Sector-62, Institutional Area, Noida- 201309.
3. The Director of Education, Directorate of Education, Govt. of NCT of Delhi, Old Secretariat, Delhi-110054.
4. The Director of Public Instructions (Schools), Union Territory Secretariat, Sector 9, Chandigarh-160017.
5. The Director of Education, Govt. of Sikkim, Gangtok, Sikkim – 737101.
6. The Director of School Education, Govt. of Arunachal Pradesh, Itanagar – 791 111
7. The Director of Education, Govt. of A&N Islands, Port Blair - 744101.
8. The Director of Education, S.I.E., CBSE Cell, VIP Road, Junglee Ghat, P.O. 744103, A&N Islands.
9. The Secretary, Central Tibetan School Administration, ESS Plaza, Community Centre, Sector 3, Rohini, Delhi-110085.
10. The Additional Director General of Army Education, A –Wing, Sena Bhawan, DHQ, PO, New Delhi-110001.
11. The Secretary AWES, Integrated Headquarters of MoD (Army), FDRC Building No. 202, Shankar Vihar (Near APS), Delhi Cantt.-110010.
12. All Regional Directors/ Regional Officers of CBSE with the request to send this circular to all the Heads of the affiliated schools of the Board in their respective regions.
13. All Associate Professor & Additional Directors/ Advisors/ Consultants/Education Officers.
14. All Additional Director/ Joint Director/ Deputy Director/ Assistant Director, Vocational Cell.
15. The Under Secretary (EE-I), Ministry of Human Resource Development, Shastri Bhawan, New Delhi.
16. The Officer in charge of I.T. with the request to put this circular on the CBSE websites.
17. All Assistant Professor & Joint Directors, CBSE
18. All Assistant Professor & Deputy Directors, CBSE
19. The Assistant Librarian, CBSE
20. The Public Relations Officer, CBSE
21. The Hindi Officer, CBSE
22. PS to Chairman, CBSE
23. PS to Secretary, CBSE
24. PS to Controller of Examinations, CBSE
25. PS to Director (Special Exams and CTET), CBSE
26. PS to Director (Information Technology), CBSE
27. PS to Director (Vocational & EDUSAT)

**Sd/-**  
**Additional Director (Innovation and Research)**