



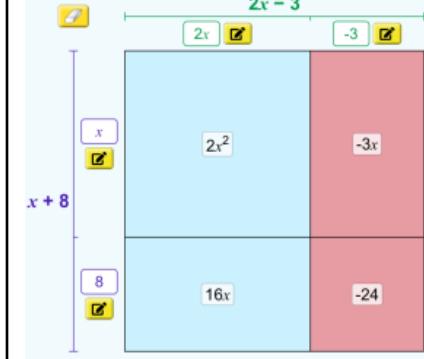
BLOOM PUBLIC SCHOOL

C-8 Vasant Kunj, New Delhi

Syllabus for the Session 2025-26

Class: VIII

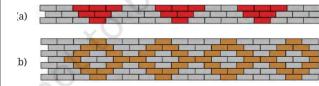
Subject: Mathematics

MONTH	CHAPTER (NCERT Text book)	CONTENT (Topics)	Practical/Activities
April	* Bridge course activity * Square and Square Roots	* Bridge course activities * Square of a number * Square root of a number by prime factorisation & division method * Identities: $(a - b)^2$, $(a + b)^2$, $a^2 - b^2$.	https://ncert.nic.in/pdf/Bridge_Programme/Grade8/Bridge_Programme-Mathematics-Grade_8.pdf SUBJECT ENRICHMENT ACTIVITY 1: Prove that $(a + b)^2 = a^2 + b^2 + 2ab$.
May	* Bridge course activity * Linear Equations In One Variable	* Bridge course activities * Solving linear equations * Framing linear equations	https://ncert.nic.in/pdf/Bridge_Programme/Grade8/Bridge_Programme-Mathematics-Grade_8.pdf SUBJECT ENRICHMENT ACTIVITY 2: Mystery Number Challenge- Use linear equations to guess a hidden number.
July	* Algebraic expressions and identity	* Expressions, terms, factors, coefficients, monomials, binomials, and polynomials * Operations on Algebraic Expressions * Algebraic Identities * Factors of Algebraic Expressions * Factors of Algebraic Expressions * Factorization Using Identities	PHET (interactive panel) Area Model Algebra 

MONTH	CHAPTER (GANITA PRAKASH Text book)	CONTENT (Topics)	Practical/Activities
August	* CH-1 A Square and A Cube * CH-4 Quadrilaterals	* Square of a number * Square root of a number by prime factorisation & division method *Cube of a number * Cube root of a number by prime factorisation.	https://ncert.nic.in/pdf/Bridge_Programme/Grade8/Bridge_Programme-Mathematics-Grade_8.pdf SUBJECT ENRICHMENT ACTIVITY 3: Prove that $(a + b)^2 = a^2 + b^2 + 2ab$.
September	Revision of Mid Term exam	-	-
October	*CH-5 Number Play *CH- 3 A Story Of Numbers	*Early Counting Systems *The Hindu-Arabic Number System *Importance of Place Value *Creating Your Own Number System *Early Number Systems *exploring numbers, patterns, and relationships between numbers	SUBJECT ENRICHMENT ACTIVITY 4: Explanation with Algebra and Visualisation SUBJECT ENRICHMENT ACTIVITY 8:
November	*CH- 6 We Distribute, Yet things Multiply *CH- 7 Proportional reasoning *CH-2 Power Play	*distributive property of multiplication over addition * simplify expressions by distributing a factor across a sum *Application in Simplification	SUBJECT ENRICHMENT ACTIVITY 5:

x	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

SUBJECT ENRICHMENT ACTIVITY 6:



SUBJECT ENRICHMENT ACTIVITY 7:

$$\begin{array}{rcl}
 7^7 & 823543 & 2,401 \times 49 = \\
 7^6 & 117649 & 49^3 = \\
 7^5 & 16807 & 16807 \\
 7^4 & 2401 & 343 \times 2,401 = \\
 7^3 & 343 & \frac{16,807}{49} = \\
 7^2 & 49 & \frac{7}{343} = \\
 7^1 & 7 & \frac{16,807}{8,23,543} = \\
 7^0 & 1 & 1,17,649 \times \frac{1}{343} = \\
 7^{-1} & \frac{1}{7} & \frac{1}{343} \times \frac{1}{343} = \\
 7^{-2} & \frac{1}{49} & \frac{1}{343} \times \frac{1}{343} = \\
 7^{-3} & \frac{1}{343} & \frac{1}{2401} \\
 7^{-4} & \frac{1}{2401} &
 \end{array}$$

SUBJECT ENRICHMENT ACTIVITY 8:

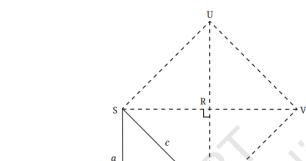
Draw the pattern shown on a squared paper and cut it out [Fig 9.20(i)]. You know that this pattern is a net of a cube. Fold it along the lines [Fig 9.20(ii)] and tape the edges to form a cube [Fig 9.20(iii)].



SUBJECT ENRICHMENT ACTIVITY 9:

First monomial \rightarrow	2x	-5y	$3x^2$	-4xy	$7x^2y$	$-9x^2y^2$
Second monomial \downarrow	4x ²
-5y	-15x ² y
$3x^2$
-4xy
$7x^2y$
$-9x^2y^2$

SUBJECT ENRICHMENT ACTIVITY 10:

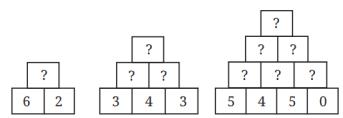


Let a be the length of the equal sides and c the length of the hypotenuse.
Area of $SPQVU = 2 \times \text{Area of } PQRS$
So, $c^2 = 2a^2$.

quantities, using the ratio notation to represent such relationships. When two or more related quantities change by the same factor, we call that relationship a proportional relationship.

- * To use algebra to model different situations and learn how to solve algebraic equations and find the values of unknown letter-numbers.
- *To understand the area of a triangle ,the area of any polygon that can be evaluated by breaking it into triangles. Area of a parallelogram ,Area of a rhombus and Area of a trapezium.

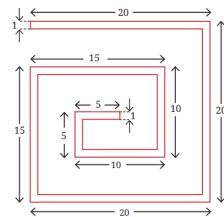
SUBJECT ENRICHMENT ACTIVITY 11:



How do we fill this pyramid?

SUBJECT ENRICHMENT ACTIVITY 12:

Find the area of the spiral tube shown in the figure. The tube has same width throughout.



PERIODIC ASSESSMENT - I

TOPIC: Square and Square Roots

TOPIC: Linear Equations In One Variable

TOPIC: Bridge course activities concepts (Case based questions)

PERIODIC ASSESSMENT -II

TOPIC : CH-5 Number Play

TOPIC:CH- 6 We Distribute, yet Things Multiply

TOPIC: CH-7 Proportional Reasoning.

MID TERM EXAM

TOPIC: Square and Square Roots (NCERT-OLD EDITION)

TOPIC: Linear Equations In One Variable (NCERT-OLD EDITION)

TOPIC: Algebraic expressions and identities (NCERT-OLD EDITION)

TOPIC: CH-1 A Square and A Cube (GANITA PRAKASH)

TOPIC: CH-4 -Quadrilaterals (GANITA PRAKASH)

FINAL EXAMINATION

Links

<https://ncert.nic.in/textbook.php?hegp1=0-7> (GANITA PRAKASH)

<https://ncert.nic.in/textbook.php?hegp2=ps-7> (GANITA PRAKASH-2)

<https://ncert.nic.in/textbook.php?hemh1=0-16> (NCERT OLD EDITION)

TOPIC: CH-1 A Square and A Cube (GANITA PRAKASH)

TOPIC: CH-2 Power Play(GANITA PRAKASH)

TOPIC: CH-4 -Quadrilaterals (GANITA PRAKASH)

TOPIC : CH-5 Number Play (GANITA PRAKASH)

TOPIC:CH- 6 We Distribute, yet Things Multiply (GANITA PRAKASH)

TOPIC: CH-7 Proportional Reasoning (GANITA PRAKASH)

TOPIC: CH-12 Factorisation (NCERT OLD EDITION <https://ncert.nic.in/textbook.php?hemh1=0-16>)

TOPIC: CH-2 The Baudhayana- Pythagoras Theorem (GANITA PRAKASH-2)

TOPIC: CH-3 Proportional Reasoning-2 (GANITA PRAKASH-2)

TOPIC: CH-7 Area (GANITA PRAKASH-2)