



D.S.B. INTERNATIONAL PUBLIC SCHOOL

RISHIKESH (UTTARAKHAND)

CLASS - X

Summer Holiday Home Work- (2024-25)



Summer Vacations are at our doorsteps. Holidays are a well deserved opportunity to relax and unwind by indulging in activities that are pleasurable at the same time educative.

It's a sincere request to all to complete holiday projects and home assignments on time. Engage yourself whole heartedly as you will learn a lot through it. Practice your hobbies or inculcate new hobbies. Do a lot of Reading-can be newspapers, magazines, books or novels. Watch English news daily in order to equip yourself with the information and facts to be used as content in the writing skills.

Summer Holidays Homework is an initiative on our part, to inculcate innovativeness, creativity and interest in the tasks assigned to our students. It will not only enable them to recapitulate what was taught but will also help them to connect themselves to the various learning processes. Please ensure that your child complete the assignment neatly.



English summer Assignment

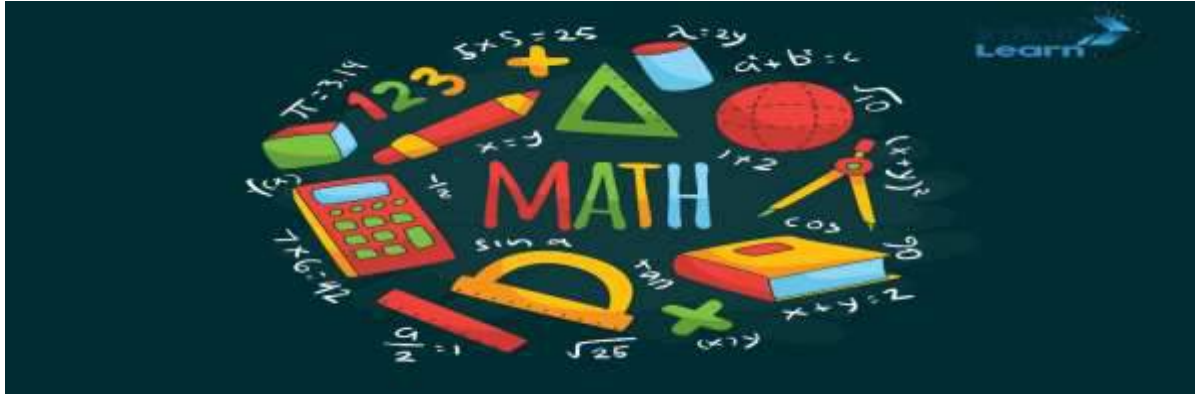
1. Write critical analysis of chapter Nelson Mandela long walk to freedom and include the key events in Nelson Mandela's life mentioned in the chapter.

Remark about the different freedom movements of India and correlate them with the Africa's struggle against apartheid.

2. Write 4 analytical paragraphs in your school Notebook. 📖

3. Read a book of your choice and write a review about it 📖

Ensure that summer Assignment is compiled in a single file.



MATHS

Art integration project

1. Prepare a PROJECT FILE showing state-wise seats for Lok Sabha election held in 2024 of each state/UT of India. Show number of seats won by all the political parties. Also show the voting percentage of male and female voters in UTTARAKHAND and PUDDUCHERRY using pie graph in this general election
Do the following sums in separate notebook .

CH-1 REAL NUMBERS

1. Consider the numbers $4n$, where n is a natural number. Check whether there is any value of n for which $4n$ ends with the digit zero.
2. Find the HCF of 96 and 404 by the prime factorization method.
Hence, find their LCM.
3. Find the HCF and LCM of 6, 72 and 120, using the prime factorisation method.
4. Find the LCM and HCF of the pair of integers 336 and 54 and verify that $\text{LCM} \times \text{HCF} =$ product of the two numbers.
5. Given that $\text{HCF}(306, 657) = 9$, find $\text{LCM}(306, 657)$.
6. Explain why $7 \times 11 \times 13 + 13$ and $7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 + 5$ are composite numbers.
7. There is a circular path around a sports field. Sonia takes 18 minutes to drive one round of the field, while Ravi takes 12 minutes for the same. Suppose they both start at the same point and at the same time, and go in the same direction. After how many minutes will they meet again at the starting point?

CH-2 POLYNOMIALS

1. Find the zeroes of the quadratic polynomial $4x^2-4x+1$, and verify the relationship between the zeroes and the coefficients.
2. Find the zeroes of the polynomial x^2-3 and verify the relationship between the zeroes and the coefficients.
3. Find a quadratic polynomial, the sum and product of whose zeroes are $\sqrt{2}$ and $1/3$, respectively.
4. Find a quadratic polynomial, the sum and product of whose zeroes are 0 and $\sqrt{5}$, respectively.

CH-3 PAIR OF LINEAR EQUATIONS IN TWO VARIABLES

1. Solve the following pair of linear equations by the substitution method :
(i) $3x - y = 3$, $9x - 3y = 9$
 $0.2x + 0.3y = 1.3$, $0.4x + 0.5y = 2.3$
2. Solve the following pair of linear equations by the elimination method and the substitution method : (i) $3x + 4y = 10$ and $2x - 2y = 2$ (ii) $3x - 5y - 4 = 0$ and $9x = 2y + 7$
3. Half the perimeter of a rectangular garden, whose length is 4 m more than its width, is 36 m. Find the dimensions of the garden.
4. The difference between two numbers is 26 and one number is three times the other. Find them.
5. The larger of two supplementary angles exceeds the smaller by 18 degrees. Find them.
6. The coach of a cricket team buys 7 bats and 6 balls for Rs 3800. Later, she buys 3 bats and 5 balls for ₹ 1750. Find the cost of each bat and each ball.
7. The taxi charges in a city consist of a fixed charge together with the charge for the distance covered. For a distance of 10 km, the charge paid is ₹ 105 and for a journey of 15 km, the charge paid is ₹ 155. What are the fixed charges and the charge per km? How much does a person have to pay for travelling a distance of 25 km?
8. A fraction becomes $11/9$, if 2 is added to both the numerator and the denominator. If, 3 is added to both the numerator and the denominator it becomes $6/5$. Find the fraction.

CH- 4 QUADRATIC EQUATIONS

1. Check whether the following are quadratic equations : (i) $(2x - 1)(x - 3) = (x + 5)(x - 1)$, (ii) $(x+2)^3 = 2x(x^2 - 1)$
2. Represent the following situation in the form of quadratic equation :
The area of a rectangular plot is 528 m^2 . The length of the plot (in metres) is one more than twice its breadth. We need to find the length and breadth of the plot.
3. Represent the following situation in the form of quadratic equation : The product of two consecutive positive integers is 306. We need to find the integers.
4. Represent the following situation in the form of quadratic equation : Rohan's mother is 26 years older than him. The product of their ages (in years) 3 years from now will be 360. We would like to find Rohan's present age.

5. Represent the following situation in the form of quadratic equation : A train travels a distance of 480 km at a uniform speed. If the speed had been 8 km/h less, then it would have taken 3 hours more to cover the same distance. We need to find the speed of the train.
6. Represent the following situation in the form of quadratic equation : John and Jivanti together have 45 14 marbles. Both of them lost 5 marbles each, and the product of the number of marbles they now have is 124. We would like to find out how many marbles they had to start with.
7. Represent the following situation in the form of quadratic equation : A cottage industry produces a certain number of toys in a day. The cost of production of each toy (in rupees) was found to be 55 minus the number of toys produced in a day. On a particular day, the total cost of production was Rs 750. We would like to find out the number of toys produced on that day.
8. Find the roots of the quadratic equation : $6x^2 - x - 2 = 0$.
9. Find the roots of the quadratic equation : $100x^2 - 20x + 1 = 0$. 10. Find the roots of the quadratic equation : $2x^2 - x + 1/8 = 0$.

CH- 7 COORDINATE GEOMETRY

1. Determine if the points (1, 5), (2, 3) and (-2, -11) are collinear.
2. Check whether (5, -2), (6, 4) and (7, -2) are the vertices of an isosceles triangle.
3. Find the point on the x-axis which is equidistant from (2, -5) and (-2, 9).
4. Find the values of y for which the distance between the points P(2, -3) and Q(10, y) is 10 units.
5. If Q(0, 1) is equidistant from P(5, -3) and R(x, 6), find the values of x. Also find the distances QR and PR.
6. Find a relation between x and y such that the point (x, y) is equidistant from the point(3, 6) and (-3, 4).
7. Find the coordinates of the point which divides the join of (-1, 7) and (4, -3) in the ratio 2 : 3.
8. Find the coordinates of the points of trisection of the line segment joining (4, -1) and (-2, -3).
9. Find the ratio in which the line segment joining the points (-3, 10) and (6, -8) is divided by (-1, 6).
10. Find the ratio in which the line segment joining A(1, -5) and B(-4, 5) is divided by the x-axis. Also find the coordinates of the point of division.
11. If (1, 2), (4, y), (x, 6) and (3, 5) are the vertices of a parallelogram taken in order, find x and y.
12. Find the coordinates of a point A, where AB is the diameter of a circle whose centre is (2, -3) and B is (1, 4).
13. If A and B are (-2, -2) and (2, -4), respectively, find the coordinates of P such that AP = $\frac{7}{3}$ AB and P lies on the line segment AB.
14. Find the coordinates of the points which divide the line segment joining A(-2, 2) and B(2, 8) into four equal parts. 15. Find the area of a rhombus if its vertices are (3, 0), (4, 5), (-1, 4) and (-2, -1) taken in order.

SOCIAL SCIENCE



SOCIAL SCIENCES

TOPIC:- CONSUMERS RIGHT (INFOGRAPHIC MAKING:- DATA VISUALISATION INFOGRAPHIC):-

- * Different types of consumers rights that you have as a consumer. * COPRA
- * Role of courts in implementation of consumer rights.
- * How you can spread consumer awareness.
- * Case study



ART AND CRAFTS

- 1- Stitch a cloth bag by using old clothes , old jeans etc(for girls)
- 2- Do fabric print on a pillow cover by using fabric colours (for boys).