



FEDERAL DIRECTORATE OF EDUCATION

Summer Vacation Task

Mathematics-----Class-VII

**SESSION
2023-24**





www.fde.gov.pk

SUMMER VACATION HOMEWORK

CLASS: 7th

NOTE: Summer vacation homework must be completed in full. Attempt the Questions on loose sheet. File containing all loose sheet must be submitted on the first day after vacations.

Sr.	SLOs	Test Items
1	Additive and Multiplicative Inverses	<p>Q.No.1: Find multiplicative inverses of following</p> <ol style="list-style-type: none">1. 32. 263. -65 <p>Q.No.2: Find Additive inverse of following</p> <ol style="list-style-type: none">1. 52. 353. -34
2	Word problems involving Rational Numbers	<p>Q.No.3: Arrange the following in ascending order 35,2,0.10, -0.2</p> <p>Q.No.4: In a school,1932 students of class 7 own tablets whereas,1628 students of class 8 have tablets. Which class has greater fraction of students with tablets.</p> <p>Q.No.5: Three pencils have lengths of 38,12,34. What is measure of pencil with greatest and smallest length.</p> <p>Q.No.6: The temperature in a city at 6 a.m. was -10F and increased by 15F at noon. What was the temperature at noon?</p> <p>Q.No.7: If you sleep 13 of each day. Calculate your sleep time during the month of June.</p> <p>Q.No.8: Divide 514 kg of almonds into 34 kg bags. How much bags can be made?</p> <p>Q.No.9: To attend the class field trip ,24 students bought permission slips .If this represented 13 of the class ,how many students are there in a class.</p>
3	Finding square of a number	<p>Q.No.10: Find the square of following numbers.</p> <ol style="list-style-type: none">1. 92. 113. 164. 455. 73 <p>Q.No.11: Find squares of first 10 even numbers. Check whether square of even number is even or not.</p> <p>Q.No.12: Find squares of First 15 prime numbers.</p>

4	Perfect Squares	<p>Q.No.13. Write all the Perfect Squares from One to 150</p> <p>Q.No.14. Which of the following are Perfect squares? 625 ,1051, 121, 91, 25, 361, 100.</p>
5	Word problems related to ratio	<p>Q.No.15: Divide 180 into 1:2:3:4</p> <p>Q.No.16: Saria works 10 hours and earn ₹1500. How much will she get After working 15 hours?</p> <p>Q.No.17: Cost of one dozen eggs Is 350 Rupees. Find the cost of One egg?</p> <p>Q.No.18: The interior angles of quadrilateral are 40 degrees,60 degrees, 120 degrees, 140 degrees. Find the ratio of angles.</p> <p>Q.No.19: Ayesha planted 200 trees in 30 days How much trees Will he plant in next 25 days?</p>
6	Subsets of set	<p>Q. No. 20: Given $A = \{1,3,5,7,9\}$ $B = \{\text{odd numbers less than } 10\}$ state true or false.</p> <p>a) $A \subseteq B$ b) $A \neq B$ c) $A = B$ d) $B \subseteq A$</p> <p>Q. No.21: If $A = \{2,3,4\}$ $B = \{4,5,6\}$ Represent A-B on vain diagram.</p> <p>Q. No.22: Check whether or not $A - B = B - A$ $A = \{a, b, c, d, e,\}$ $B = \{e, f, g, h\}$</p> <p>Q. No.23: Given that $\epsilon = \{3,4,5,6,7,8,9\}$ $A = \{4,5,6\}$ $B = \{\text{odd numbers between } 2 \text{ and } 8\}$. List $A', B', A', n(A'), n(B')$.</p> <p>Q. No. 24: Find all Subsets of primary colors.</p>
7	Area ,perimeter, dimensions	<p>Q.No.25: Find the area and perimeter of following figures.</p> <p>1. Length=8 Ft Width= 6Ft</p>  <p>2. Length=10m</p>  <p>Q.No.26: Find the cost of fencing a square park having side length 120m and the rate of fence is 150 per meter.</p> <p>Q.No.27: Perimeter of square shaped hall is 20m. Find the cost of tiling the floor @ rupees 500 per square meter.</p> <p>Q.No.28: The length of rectangle is twice of its width. Find the dimensions if the perimeter is 288m.</p>
8	Verification of properties	<p>Q.No.29: Write the name of properties for following</p> <p>1. $a + b = b + a$</p>

		2. $(3+4) + 7 = 3 + (4+7)$ 3. $2*(3+7) = (3+7) * 2$ 4. $8*0=0$ 5. $1*4=4$
9	Sequences & Series	Q. No. 30: Write next three terms for following. a) 4,7, 10, b) 1,6,11, 16, ... c) 3,9,27, d) 16, 14, 12, ... Q. No. 31: Generate two terms by putting values of n. a) $a_n = 2n$ b) $a_n = 2n+1$ c) $a_n = 2n - 1$ Q. No 32: Find sum of odd integers from 1 to 30. Q. No. 33: Find sum of first ten prime numbers.

VACATION PROJECT

Students have to complete one project to practice the practical application of knowledge. Following is the detail of project

Sr.	SLOs	Project Detail	Project Deliverables Details
1	Application of data handling. <ul style="list-style-type: none"> Construct Frequency Table Draw Bar Graph Calculate mean, median, mode 	Calculate mean, median and mode of the expenses you made from January 2023 to May 2023. Also draw vertical and horizontal bar graphs.	Students will make a frequency distribution table on loose sheets. Draw bar graph on graph paper. Calculate mean, median and mode on loose sheets.
2	Calculation of area of rectangle and squares.	Take a rectangle of 10cm x 6cm and find how many squares you can draw from it. Also find the areas of rectangle and squares.	Students will partition the rectangular paper into equal parts. Students will calculate the area of rectangle and squares on loose sheets.