Brain International School

Vikas Puri, New Delhi

REVISION ASSIGNMENT TERM-1

SUBJECT: MATHEMATICS **CLASS-VI** **AUGUST,2025**

PATTERNS IN MATHEMATICS

Q1. Find the rule given in the pattern: 3, 7, 13, 21, 31. What will be the 13th term?

Q2. What will be the pattern rule for given series: 625, 125, 25, 5.

Q3. List the first 7 odd natural numbers and find their sum.

Q4. Draw a stacked triangle with 36 small triangles.

Q5. Identify the triangular and hexagonal numbers less than 20.

Q6. What will be the value of: 1+2+3+…….+49+50+49+……..+3+2+1.

LINES AND ANGLES

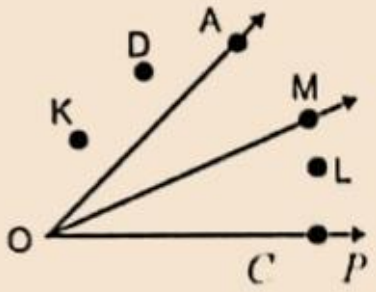
Q1.

In the adjoining given figure Name

a) Three angles

b) Points in the interior of ∠AOC

c) Points in the exterior of ∠AOC.

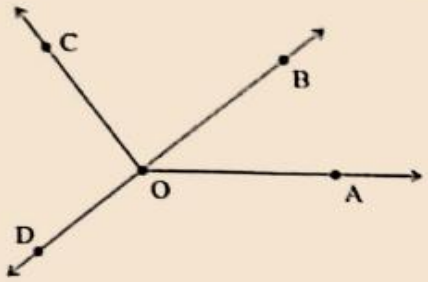


Q2. Explore the angles made the hands of a clock:

a)

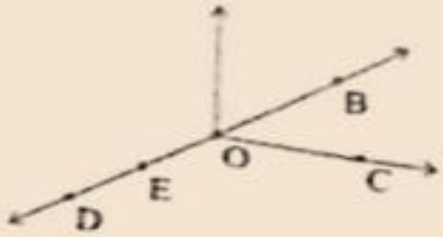
b)

Q3. Measure and classify each angle:



Angle	Measure	Type
∠AOB		
∠AOC		
∠BOC		
∠DOC		
∠DOA		
∠DOB		

Q4. Use the given figure to answer the following questions:



a) Five points

b) A line

c) Four Rays

d) Five line segments

NUMBER PLAY

Q1. Form the smallest possible 3-digit number with a digit sum equal to 10.

Q2. Choose any 4-digit number using the digits 5,3,8 and 1 to create the largest and smallest numbers possible. Find their sum and difference.

Q3. What is the value of A, if the given number is a palindrome?
41598A8951A

Q4. How many steps are needed to turn 87 into a palindrome by reversing the digits and adding the numbers repeatedly?

Q5. Write two 4-digit numbers that when added give the number 5654?

Q6. How many rounds does the number 9531 take to reach Kaprekar constant?

Q7. Starting with the number 12, list the sequence generated by the Collatz conjecture until it reaches 1.

DATA HANDLING AND PRESENTATION

Q1. Construct the frequency table for the following:

6, 7, 8, 6, 5, 6, 7, 7, 9, 8, 10, 7, 6, 7, 8, 8, 9, 10, 5, 7, 8

Q2. Read the given pictograph and answer the following questions:

Average Monthly Rainfall
May - December 2021

Month	Average Precipitation (mm)
May	
June	
July	
August	
September	
October	
November	
December	

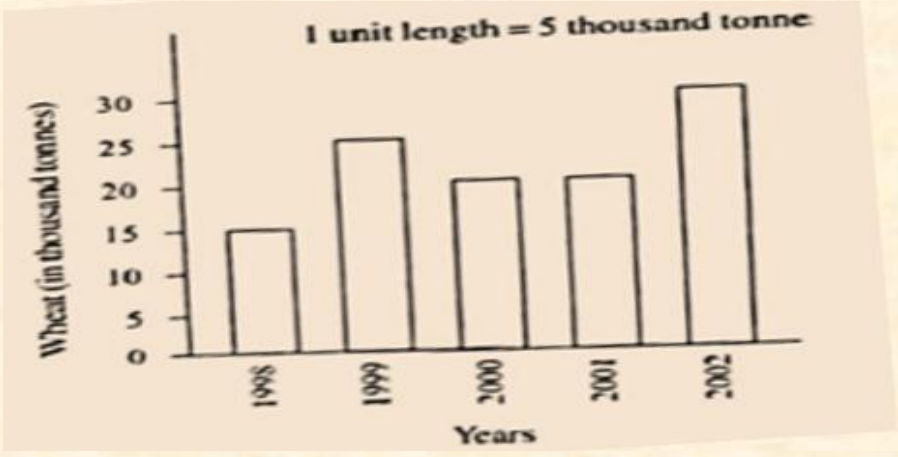
Key: = 20 mm = 10 mm

(i) In which month was the precipitation maximum?
(ii) What was the average precipitation in the month of October?
(iii) How much more observation was observed in September than in December?

Q3. Read the bar graph:

The bar graph given alongside shows the amount of wheat purchased by government during the year 1998-2002. Read the bar graph and write down your observations. In which year was:

a) The wheat production maximum?
b) The wheat production minimum?



Q4. Draw a pictograph:

The modes of travelling to school by 160 students are given below. Draw a pictograph

Mode	By walking	By cycle	By car	By bus
No. of students	30	50	10	70

Q5. Draw a Bar-graph:

A survey of 120 school students was done to find which activity they prefer to do in their free time:

Preferred Activity	Number of Students
Playing	45
Reading story book	30
Watching TV	20
Listening to music	10
Painting	15

Draw a bar graph to illustrate the above data taking scale of 1 unit length = 5 students. Which activity is preferred by most of the students other than playing?

ASSERTION – REASON QUESTIONS

DIRECTION: In the following questions, a statement of **Assertion(A)** is followed by a statement of **Reason (R).** Choose the correct option.

(a) Both Assertion and Reason are true and Reason is a correct explanation of Assertion.

(b) Both Assertion and Reason are true but Reason is not a correct explanation of Assertion.

(c) Assertion is true and Reason is false

(d) Assertion is false and Reason is true.

Q1) **Assertion(A):** The sum of two consecutive odd numbers is always even.

Reason(R): Adding two odd numbers results in an even number.

Q2) **Assertion(A):** 5 is a composite number.

Reason(R): A number having more than two factors are called composite numbers.

Q3) **Assertion(A):** An infinite number of lines can be drawn through a point.

Reason(R): Only one line can be drawn through two given points.

Q4) **Assertion(A):** A pictograph represents data through pictures of objects.

Reason(R): Key of a pictograph tells the number that each picture or symbol.

Q5) **Assertion(A):** Factors of 34 are 1, 2, 17 and 34

Reason(R): Every factor is less than or equal to the given number.

Q6) **Assertion(A):** The sum of the factors of any number is twice the number.

Reason(R): A number whose sum of all its factors is equal to twice the number is called a perfect number.

MULTIPLE CHOICE QUESTIONS (MCQ)

Q1) The bars used to count frequencies are called

a) Bars b) tally marks c) range d) key

Q2) The sequence 4, 9, 16, 25 represents _____ type of numbers.

a) Prime numbers b) square numbers c) odd numbers d) triangular numbers

Q3) The next number in the given pattern: 2, 6, 12, 20, 30, …….

a) 36 b) 42 c) 45 d) 40

Q4) The example of a line segment is

a) crossing roads b) tube light c) sun rays d) light from torch

Q5) Multiples of a number are

a) finite b) two c) infinite d) more than two

Q6) A line segment does not have a

a) mid-point b) width c) length d) end points

Q7) The only even number that is not a composite number

a) 2 b) 4 c) 6 d) 8

Q8) The palindrome number is

a) 14541 b) 7890 c) 7733 d) 1010

Q9) The largest 6-digit number that has a digit sum of 27, with no repetition

a) 895704 b) 894570 c) 987540 d) 405789

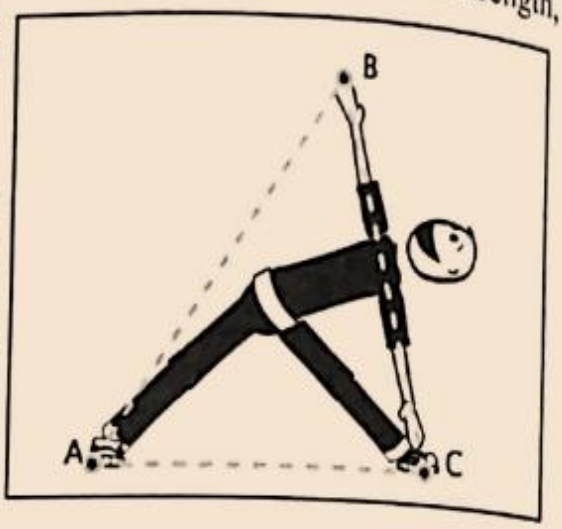
Q10) The number that can form a palindrome when reversed and added once.

a) 34 b) 29 c) 85 d) 68

CASE-STUDY BASED QUESTIONS

Q1.

Yoga is a series of stretches and poses that you do with breathing techniques. It improves strength, balance, and flexibility. It is good for our body, mind, and soul. June 21 has been declared the 'International Day of Yoga.'



Yoga Day was celebrated in the school on 21st June, in which the participation of all the students was mandatory. The students made different mudras.

a) Name the polygon formed by joining the dotted lines.

b) Write the name of angles formed in the polygon.

c) Write the name of line segments.

d) Name the following:

i. Angle opposite to side AB.

ii. Vertex opposite to side AC

iii. Side opposite to vertex A.

Q2.

An art teacher is arranging coloured tiles in patterns on a classroom wall. She arranges them such that the number of tiles in each row forms a sequence. The sequence goes 1, 4, 9, 16, ... representing the number of tiles in each row.

A) What type of numbers is she using in each row, and what is the next number of tiles in the sequence?

B) How many tiles will she need to make five rows?

C) If the sequence of the set of tiles is continued, how many tiles will she have in the 8th row?