



REVISION SHEET

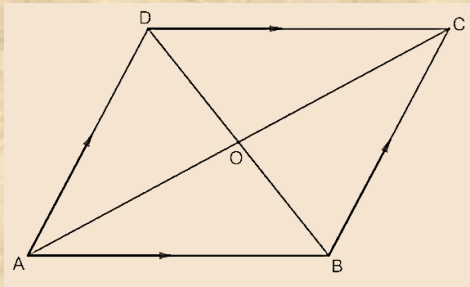
SUBJECT: MATHS

CLASS-VI

TERM 1

LINES AND ANGLES

Q1. In the given figure below:



- a) Name any four angles that appear to be acute angles.
- b) Name any two angles that appear to be obtuse angles.

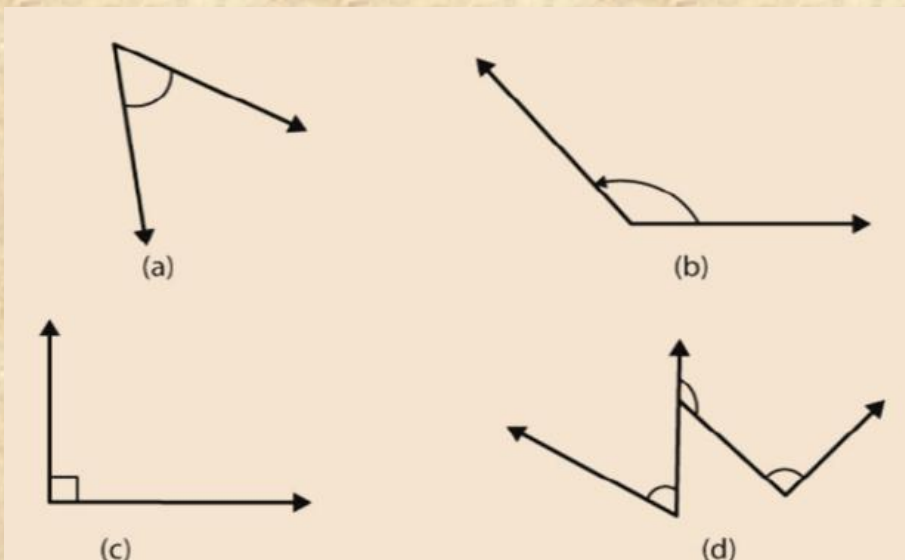
Q2. How many lines can pass through:

- a) Two points
- b) One point

Q3. Draw the letter 'Y' such that the three angles formed are 150° , 60° and 150° .

Q4. Find the measure of two-third of a right angle.

Q5. Measure the given angles using protractor, then classify each angle as acute, obtuse, right or reflex:



Q6. Using a protractor, draw the angles of following degree measure:

- a) 55° b) 240° c) 165° d) 130°

Q7. Is the angle formed by the hands of a clock at 5 o'clock greater than or less than 240° ? Give reason.

NUMBER PLAY

Q1. Form the largest possible 3-digit number with a digit sum equal to 14.

Q2. Choose any 4-digit number using the digits 7, 2, 9, and 4 to create the largest and smallest numbers possible.

Find their sum and difference.

Q3. What is the value of **B**, if the given number is a palindrome: **62741B14726**

Q4. How many steps are needed to turn 59 into a palindrome by reversing the digits and adding the numbers repeatedly?

Q5. Write two different 4-digit numbers that when added give the number 6842.

Q6. How many rounds does the number 3524 take to reach the Kaprekar constant (6174)?

Q7. Starting with the number 19, list the sequence generated by the Collatz Conjecture until it reaches 1.

DATA HANDLING AND PRESENTATION

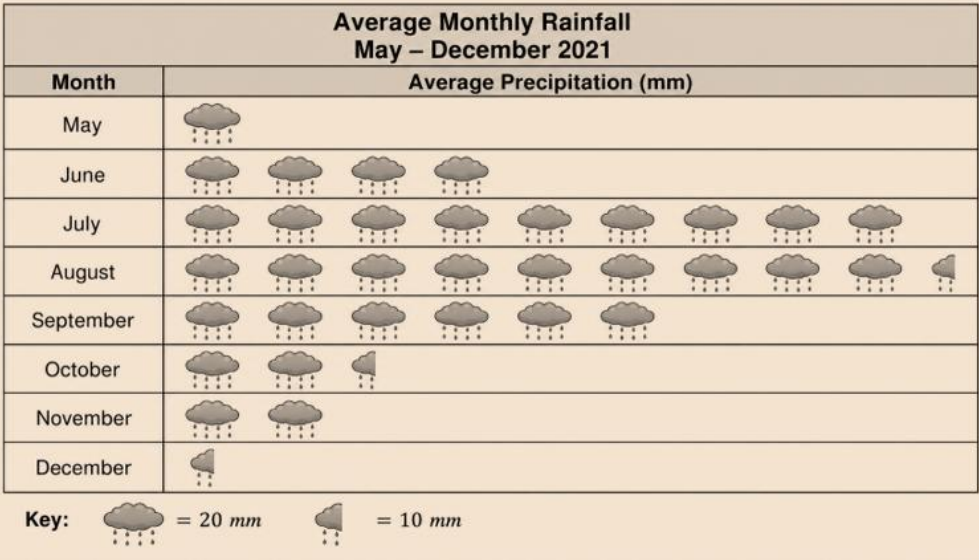
Q1. Construct the frequency table for the following:

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

Q2. The following data shows the number of students (160) using different modes of transport for commuting. Represent the given information using a pictograph.

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

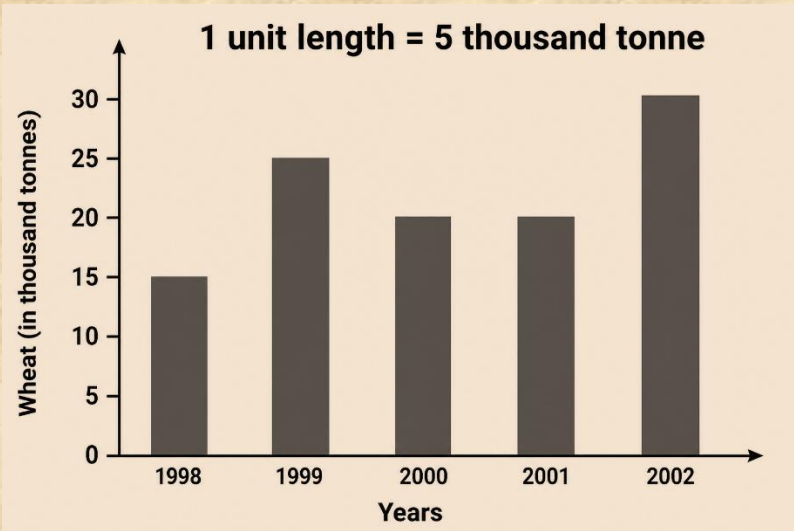
Q3. Read the given pictograph and answer the following questions:



- (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?
- (iv) What is the difference in the average precipitation of June and August?

Q4. The bar graph given below shows the amount of wheat purchased by government during the year 1998-2002. Read the bar graph and answer the following questions:

- a) In which year was the wheat production maximum?
- b) In which year was the wheat production minimum?
- c) How much wheat was produced in year 1999?
- d) In which years were the wheat production equal?



Q5. A survey of 120 students was done to find which activity they prefer to do in their free time. Draw a bar graph to illustrate the given data. Use the appropriate scale for the same. Which activity is preferred by most of the students other than playing?

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

PRIME TIME

Q1. Find the common factors of:

- a) 24, 40 b) 75, 60 and 210

Q2. Find the prime factorization of these numbers without multiplying first.

- a) 72×16 b) 100×48

Q3. Write the multiples of 30 that lie between 123 and 290.

Q4. Are the following numbers co-prime?

- a) 55 and 57 b) 112 and 116

Q5. Is the first number divisible by the second number?

- a) 468 and 27

Q6. Is 28 a perfect number? Justify your answer.

Q7. Find the largest and smallest 4-digit numbers that are divisible by 5 and are also palindromes.

SYMMETRY

Q1. Find the number of reflection symmetry in the following. Draw and show the lines of symmetry:

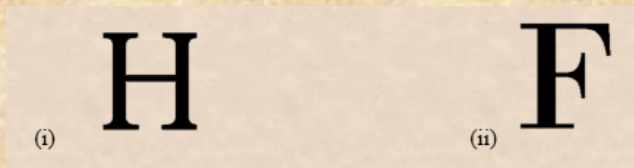
- a) Square
b) Rhombus
c) Kite
d) Parallelogram

Q2. Find the order and angle of rotational symmetry in the following:

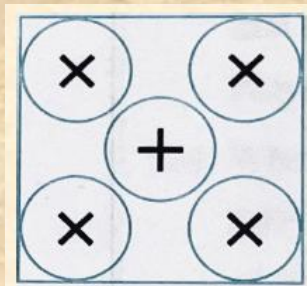
- a) Rectangle
- b) Pentagon
- c) Ashoka Chakra

Q3. Name any one shape having reflection symmetry but no rotational symmetry.

Q4. How many lines of symmetry do the following alphabets have?



Q5. Find the lines of symmetry and rotational symmetry for the following figure?



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) _____ has prime factorization of four 2s, one 3 and one 5.

- a) 30 b) 240 c) 160 d) 480

Q3) The smallest number that is the multiple of all the numbers from 1 to 5 is

- a) 60 b) 50 c) 30 d) 20

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

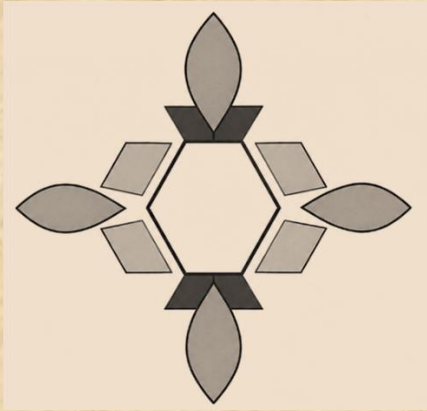
- a) 895704 b) 894570 c) 987540 d) 405789

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

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

CASE BASED QUESTIONS

Q1. A designer is creating a logo for a new company. The logo is a combination of geometric shapes. One part of the logo is a regular hexagon. The designer wants to ensure that the logo is visually balanced and appealing, which often involves using symmetry.



Based on the given information, answer the following questions.

- (a) How many lines of symmetry does a regular hexagon have?
- (b) Draw a regular hexagon and mark all its lines of symmetry.
- (c) If the designer uses a figure that has rotational symmetry of order 4, what is the angle of rotation for this figure? Give an example of such a figure.

Q2. A school is organizing a sports day. The number of students participating in different events are as follows:

Event	Number of Students
 Running	60
 Jumping	45
 Shot Put	30
 Discus Throw	15



The sports committee wants to arrange the students for the opening ceremony in rows such that each row has the same number of students and no student is left out from any event. Also, they want to find the smallest number of identical kits (jerseys and shorts) they need to buy if they want to ensure every student gets a kit for each event they participate in, and the kits are to be distributed equally among the events.

Based on the information above, answer the following questions:

- a) What is the maximum number of students that can be arranged in each row for the opening ceremony?
- b) What is the smallest number of identical kits the school needs to buy?