# KOTHARI INTERNATIONAL SCHOOL, NOIDA <br> TERM END ASSESSMENT, 2023-2024 <br> GRADE 6: SUBJECT: MATHEMATICS <br> SET-A <br> SECTION B (SUBJECTIVE QUESTIONS) 

DAY \& DATE: MONDAY, 11 MARCH, 2024 NAME: $\qquad$
GRADE/SEC: $\qquad$

TIME ALLOWED: 2.5 HOURS
MAXIMUM MARKS: 60

GENERAL INSTRUCTIONS:

1. This question paper consists of 3 pages and 22 questions.
2. It is compulsory to attempt all the questions.
3. Show steps/working wherever necessary.

Do as directed-

1. The first, third and fourth terms of a proportion are 6,12 and 36 . What is the second term?
2. Find the difference between the shaded parts if shaded parts are expressed in fractions?

3. Ryan wants to put a lace around a square cloth with length 15 meter. He bought a lace of length 40 meter. How much more does he need?
4. Solve using a number line: 3 less than - 8
5. Give expressions for the following:
a) ' $X$ ' is multiplied by $-\mathbf{3}$ and $\mathbf{2}$ added to the product.
b) ' $P$ ' is subtracted from 5 and 4 is added to the result.
6. The perimeter of a square piece of cardboard is 80 cm . Find its area.
7. Determine whether the following ratios are in proportion. If they are in proportion, write the middle term and extreme term.
$2 \mathrm{~kg}: \mathbf{7 0} \mathrm{kg}$ and $\mathbf{3 0 ~ s e c}: 5$ minutes
8. The circumference of three tyres are 40,50 and 70 cm . If they are moving simultaneously, then what is the least distance they should cover before they make one revolution?
9. A rope of length 5.36 m is attached to another rope of length 3.69 m . What length of rope will be left if $\mathbf{2 . 7 2} \mathbf{~ m}$ is used up for packing a box?
10. What is the sum of the largest 4-digit positive integer and smallest 3-digit negative integer?
11. Mr. Rajan got a job at the age of 24 years and he retired from the job at the age of 60 years.

What fraction of his age till retirement was he in the job?
12. The breadth of a rectangular field is $\mathbf{2 0} \mathbf{~ m}$. If the perimeter of the field is $\mathbf{8 0 0} \mathbf{~ m}$, what is the length of the field? Also find the area of the field?

OR
A piece of string is $\mathbf{3 6} \mathbf{c m}$ long. What is the length of each side if the string is used to form:
(a) square
(b) an equilateral triangle.
13. Subtract $4 \frac{5}{6}$ from the sum of $3 \frac{5}{9}$ and $3 \frac{1}{3}$
14. Ten years old Rahul can carry a maximum weight of 15 kg . If he bought 4 kg 900 g of apples, 2 kg 600 g of grapes and 5 kg 300 g of mangoes. Can he carry the total weight that he bought? If yes, then how much more weight can he carry with him?

OR
Subtract the sum of 114.753 and 70.14 from the sum of 93.12 and $\mathbf{2 1 2 . 1 5}$.
15. What number should be added to the sum of 247 and $\mathbf{- 6 7}$ to make it equal to the smallest

3 - digit number?
16. A motorbike travels $\mathbf{2 6 0} \mathbf{~ k m}$ in $\mathbf{5}$ hours. How far will it travel in $\mathbf{1 5}$ hours $\mathbf{3 0}$ minutes?

OR
A total of $\mathbf{2 8 0}$ marbles is to be divided among three boys Arun, Harshit and Krish respectively in the ratio 2:5:7. Find the difference in the marbles between Krish and Arun.
(3M)
17. Shweta has made a chart on 'Elementary shapes'. She develops a pattern for the border using sticks as follows:

1

2

3

Find a rule that helps her find the number of sticks.
18. The side of a square tile is 10 cm . How many tiles can be fixed on one side of a wall which is 2.5 m long and 2 m high?
19. A string, $36 \frac{1}{3} \mathrm{~m}$ long, was cut into three parts measuring $12 \frac{2}{5} \mathrm{~m}, 13 \frac{1}{2} \mathrm{~m}$ and $5 \frac{4}{15} \mathrm{~m}$. What was the length of the remaining string?
20. Out of 1800 students present in a school, 750 students opted for basketball, 800 students opted for cricket, and the remaining students opted for table tennis. If a student can choose only one single game, then find the ratio of :
(i) Number of students who opted for the sport basketball to the number of students who chose the sport table tennis.
(ii) Number of students who opted for the sport cricket to the number of students opting for the sport basketball.
(iii) Number of students who opted for the sport basketball to the total number of students.
21. Find the greatest number that divides 229, 158 and 391 leaving remainders 5, 6, and 7, respectively.

## OR

Find the least number of five digits that is exactly divisible by 16, 18, 24 and 30.
22. CASE STUDY- Answer the questions that follow -

To add a positive integer we move towards the right on a number line and for adding a negative integer we move towards left.
i) - 6 will be $\qquad$ to zero.
a) Right
b) Left
ii) A positive integer will always be to the right of the zero.
a) True
b) False
iii) A negative integer will always be to the right of the zero.
a)True
b) False
iv) 7 will be $\qquad$ to zero.
a) Left
b) Right

