SAMPLE PAPER (TERM-I)
SESSION 2019 -20
CLASS - VII
SUBJECT - MATHEMATICS

Time - 3 Hrs. **Maximum Marks: 80**

General Instructions:

- All questions are compulsory.
- The question paper consists of 30 questions divided into four sections A, B, C and D.
- Section A contains 6 questions of 1 mark each. Section B contains 6 questions of 2 marks each. Section C contains 10 questions of 3 marks each. Section D contains 8 questions of 4 marks each.
- There is no overall choice. However, an internal choice has been provided in four questions of 3 marks each and three questions of 4 marks each. You have to attempt only one alternatives in such questions.

Section A

(each question carries one mark)

1. Write a pair of integers whose difference gives an integer less than both the integers.

2. Find the value of $3\frac{1}{4} + 5\frac{1}{6}$

3. What is the probability of choosing letter 'M' from the word 'MATHEMATICS'?

4. Write the multiplicative inverse and additive inverse of $\left(\frac{-7}{20}\right)$

5. If the cost of a notebook is Rs.4 more than the cost of three pens and the cost of the notebook is Rs.46. Set up an equation to find the cost of pen.

6. Is it possible to have a triangle with sides 5cm, 6cm and 4cm?

Section B

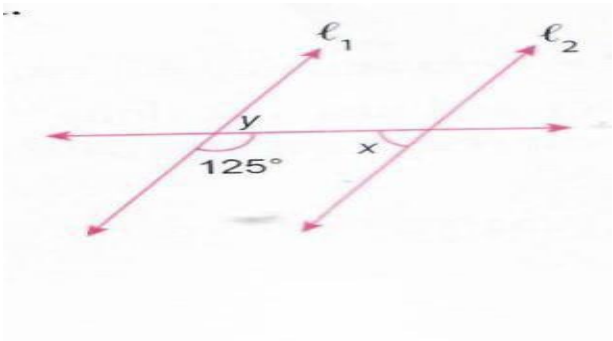
(each question carries 2 marks**)**

7. Represent $\frac{-7}{9}$ on a number line.

8. Convert the following units as directed:
(a) 500ml to litres
(b) 520 m to km

9. Use property to solve the following
(a) (-326) × 105
(b) 4× (-512) × 25

10. Find the measures of x and y in the following figure if $l_1 \parallel l_2$.



11. The marks obtained by 30 students in math test are as follows:
4,4,5,6,7,5,4,8,10,9,10,9,4,5,6,6,4,8,8,7,4,8,9,4,3,8,6,4,6,10
Make a frequency distribution table using tally marks.

12. If the measure of two angles of a triangle are 52˚and 78˚.find the measure of the third angle

Section C

(each question carries 3 marks)

13. Insert three rational numbers between $\frac{1}{-3}$ and $\frac{-4}{5}$.

14. Niti reads $\frac{3}{8}$ of a book and finds that 90 pages are still left. Find

(a) How many pages are there in the book?

(b) How many pages has Niti read?

OR

Reema reads $\frac{1}{5}$ th pages of a book. If she reads 40 pages more, she would have read $\frac{7}{10}$ th pages of the book. How many pages are left to read?

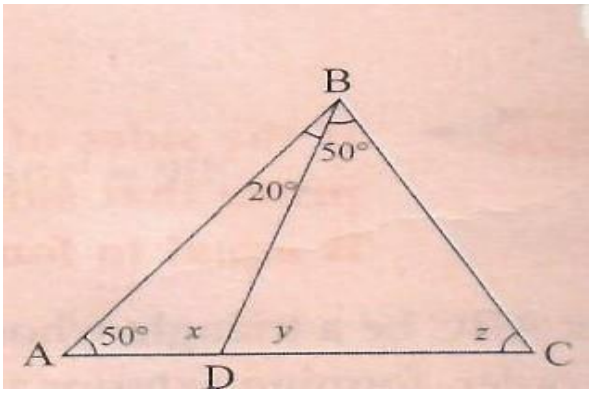
15. The supplement of an angle is one third of itself. Find the angle and its supplement.

OR

An angle is 30˚ less than two times its supplement. Find the angles.

16. Solve for x: $\frac{5x}{8} + \frac{15}{4} = 5$

17. Find *x, y* and *z* in the figure given below:



18. The number of workers employed at the work site of a construction company for 11 months is given below:

43, 52, 56, 47, 53, 60, 45, 40, 52, 48, 50

Find the mean, median and mode of the given data.

19. At a place the temperature at 12 noon was 12˚C above zero. If it decreases at the rate of 2˚C per hour until midnight, at what time would the temperature be 4˚C below zero?

20. A 17 m long ladder reached a window 15 m high from the ground on placing it against a wall . Find the distance of the foot of the ladder from the wall.

OR

Can 5cm, 12 cm and 13cm be the sides of right angled triangle? Justify your answer.

21. The length of a rectangle is 5 cm more than its breadth. If the perimeter of the rectangle is 38 cm Find its length and breadth.

OR

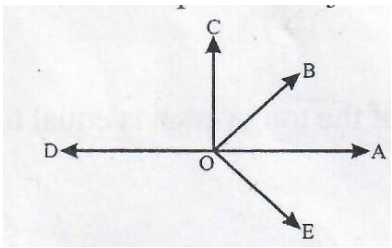
Anju is 4 times as old as his son. After 16 years, she will be twice as old as his son. Find her son's present age.

22. In the given figure, identify:

(a) A pair of unequal supplementary angles

(b) A pair of adjacent angles which do not form a pair of complementary angles.

(c) Two linear pairs



Section D

(each question carries 4 marks)

23. Divide the sum of $\frac{65}{12}$ and $\frac{-8}{3}$ by their difference.

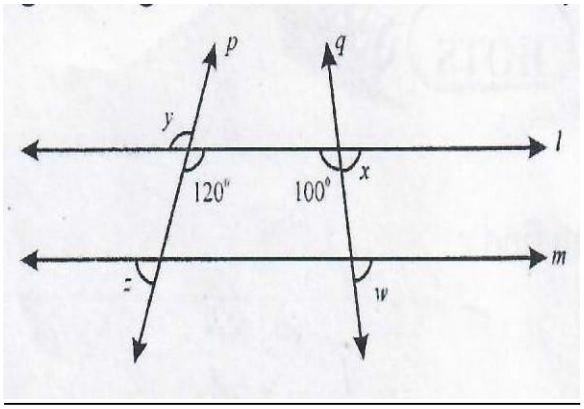
24. A fruit seller bought 300 fruits. Out of these $\frac{2}{5}$ of the fuits were mangoes and the rest were apples. $\frac{2}{15}$ of the apples were rotten . He sold the good apples at the rate of Rs $4\frac{1}{13}$ per apple How much money did he receive on selling the good apples?

25. A ladder 13 m long reaches a window which is 5m above the ground on one sideof a street. keeping its foot at the same point, the ladder is turned to the other side of the street to reach a window 12 m high. Find the width of the street.

OR

The diagonals of rhombus measure 16 cm and 30 cm. find its perimeter.

26. In the given figure, $l \parallel m$. Find the value of x, y, z and w



27. In a class test 3 marks are given for every correct answer, (-2) for every incorrect answer and no marks are given for not attempting the question.

Kritika answered all questions and scored 23 marks, though she got 11 correct answers. Calculate the number of incorrect answers given by her.

OR

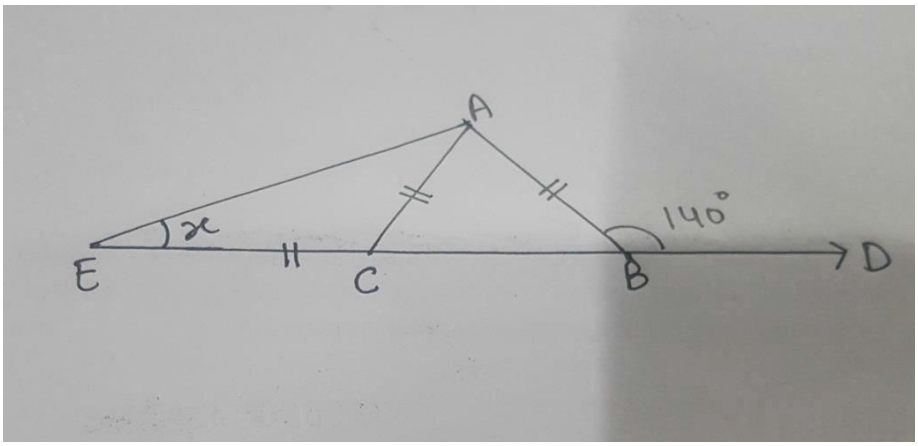
A grain wholesaler earns a profit of Rs.12 per bag of wheat sold and a loss of Rs.8 per bag of rice sold. What is the number of wheat bags he must sell to have neither profit or loss, if the number of rice bags sold is 2400?

28. Given below is the data of number of students in class VII of a school.

Class	VII A	VII B	VII C	VII D
Number of boys	25	30	25	20
Number gf girls	20	15	20	29

Draw a double bar graph to represent the above data.

29. Find the measure of *x* in the following figure:



OR

Find the perimeter of rectangle whose length is 40m and diagonal is 41m.

30. Mrs. Arora left one - fourth of her property for her son, two – thirds for her daughter and the remainder she donated to a NGO working for street children. If her donated money is Rs.700000, what was the total worth of her total property? Also mention the moral value depicted by her?