Question Paper SA - I, 2016-2017

CBSE Class VIII

Mathematics

Pratibha School

General Instruction:

- All questions are compulsory.
- The question paper consists of 32 questions divided into four sections A, B, C and D. section 'A' comprises of 10 questions of 1 mark each. Section 'B' comprises of 8 questions of 2 marks each. Section 'C' comprises of 8 questions of 3 marks each. Section 'D' comprises of 6 questions of 5 marks each.
- Internal choice has been provided in some questions. Attempt only one option in such questions.

Section-A

1. Write the additive inverse of

2. Fill in the blanks:

$$\frac{2}{3}\times\square=1$$

3. A regular pentagon has ..... sides of equal length.

4. A quadrilateral has ..... diagonals.

5. The sum of all angle of a quadrilateral is .....

6. Find the value of y in 3y – 2 = 7.

7. Solve:

$$\frac{3}{6}+\left(-\frac{1}{2}\right)$$

8. Write two positive rational numbers bigger than –2.

9. Is t = 5 the solution of the equation 5t + 3 = 24?

10. One more than $\frac{2}{3}$ of a numbers is $\frac{7}{3}$. Write the equation.

Section – B

11. Express $-\frac{3}{4}$ as a rational number with denominator 12.

12. Name the regular polygon having:

(i) four sides

(ii) Three sides

13 Solve:

8x + 3 = 27 + 2x.

14 Represent $-\frac{2}{7}$ on number line.

15. State whether the following statements are true or false.

(i) 0 is a whole number but it is not a rational number.

(ii) $\frac{12}{7}$ lies on the right side of 0 on number line.

(iii) Every integer is a rational number.

(iv) $\frac{-18}{-13}$ is a negative rational number.

16. Solve:

$\frac{1}{3}\times\left(6\times\frac{4}{3}\right)$

17. A number is 10 more than the other number and their sum 74. Find the numbers.

OR

The perimeter of a rectangle is 13 cm and its breadth is $2\frac{3}{4}$ cm Find its length.

Q18. Find a rational number between $\frac{1}{4}$ *and* $\frac{1}{3}$.

Section – C

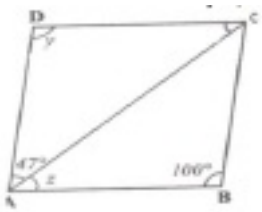
Solve the following question (Question 19-20)

19. $\frac{1}{4}x+\frac{1}{6}x=x-7$

20. 3(5x – 7)-2 (9x – 11) = 10

21. Find 8 rational numbers between $-\frac{2}{5}$ *and* $\frac{1}{2}$

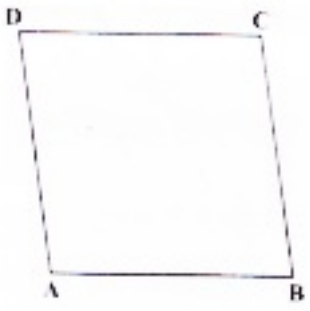
22. Find the value of x, y and z in the following parallelogram.



23. The base of an isosceles triangle is $\frac{4}{3}$ cm . If the perimeter of the triangle is $4\frac{2}{15}$ cm. Find the length of two equal sides of the triangle.

24 By what rational number should we multiply $-\frac{15}{56}$ to get $-\frac{5}{7}$?

25. ABCD is a parallelogram. Complete the following statement with reasons.



(i) AD= .....

(ii) ∠DCB = ...

(iii) ∠DCB + ∠CDA = ...

26. If 10 be added to four times a number, the result is 6 times the number. Find the number.

Section – D

27. Solve:

$$\frac{2}{5}\times\left(\frac{-3}{7}\right)-\frac{1}{6}\times\frac{3}{2}+\frac{1}{14}\times\frac{2}{5}.$$

28. Solve the equation and find the value of 'm':

$$\frac{2m+7}{5}-\frac{3m+11}{2}=\frac{2m+8}{3}-5$$

29. Rahul and Sameer had to visit their sister on Rakshabandhan, who were living on the same route under temple which was at a distance of 33 km from their home. So they decided to share a CNG car. Rahul's sister was living at a distance of $\frac{5^{th}}{11}$ of the distance to the temple. Rahul drove the car to his sister's home. After the Rakshbandhan ceremony, they left for Sameer's sister home, which was $\frac{3^{th}}{11}$ of the total distance to the temple. Now Sameer drove to his sister's home as Rahul was completely tired.

(i) What distance was covered by each of the friend?

(ii) Calculate the distance of the temple from Sameer's sister's home.

(iii) Write any value which you learn from these friends.

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

Or

If $\frac{3}{5}$ of a number exceeds its $\frac{2}{7}$ by 44. Find the number.

31. Rakhi's mother is four times as old as Rakhi. After 4 years, her mother will be three as old as she will be then. Find their present ages.

32. The width of a rectangle is $\frac{2}{3}$ of it's length. If the perimeter is 180 meters, find the dimensions of the rectangle.

OR

A man is 10 times older than his grandson. He is also 54 years older than him. Find their ages.