CBSE Class 8 Maths Sample Paper SA1 Set 2

SUBJECT: MATHEMATICS   **MAX. MARKS : 60**

CLASS : VIII   **DURATION : 2½ HRS**

General Instructions:
1. All questions are compulsory.
2. Question paper is divided into four sections: Section A consists 8 questions each carry 1 marks, Sections B consists 6 questions each carry 2 marks, Sections C consists 8 questions each carry 3 marks and Sections D consists 4 questions each carry 4 marks

SECTION – A

1. Write the additive inverse of $\dfrac{-6}{-5}$.

2. Solve : $2y + 9 = 4$

3. State the name of a regular polygon of 5 sides.

4. Find x in the adjoining figure:

5. Find the square of the number 39.

6. The list price of a frock is Rs 220. A discount of 20% is announced on sales. What is the amount of discount on it.

7. A picnic is being planned in a school for Class VII. Girls are 60% of the total number of students and are 18 in number. Find the number of boys.

8. A bag has 5 red balls and 7 yellow balls. (The balls are identical in all respects other than colour). A ball is drawn from the bag without looking into the bag. What is probability of getting a yellow ball?
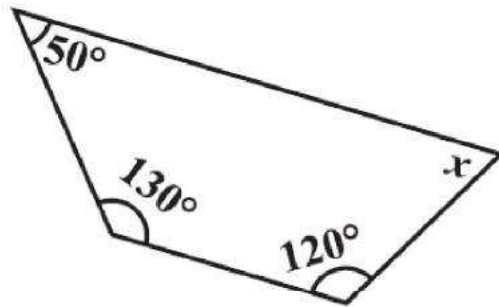
SECTION – B

9. Find two rational numbers between $\dfrac{2}{3}$ and $\dfrac{4}{5}$.

10. How many sides does a regular polygon have if each of its interior angles is 165°?

11. Find the cube root of 17576 by prime factorisation method.

12. Waheeda bought an air cooler for Rs 3300 including a tax of 10%. Find the price of the air cooler before VAT was added.

13. Find the smallest square number that is divisible by each of the numbers 4, 9 and 10.

14. The shoppers who come to a departmental store are marked as: man (M), woman (W), boy (B) or girl (G). The following list gives the shoppers who came during the first hour in the morning:

    W W W G B W W M G G M M W W W W G B M W B G G M W W M M W W
    W M W B W G M W W W W G W M M W W M W G W M G W M M B G G W

    Make a frequency distribution table using tally marks.

SECTION – C

15. Represent these numbers on the number line: $(i)\dfrac{5}{4}$ $(ii)\dfrac{-7}{6}$ $(iii)\dfrac{2}{5}$
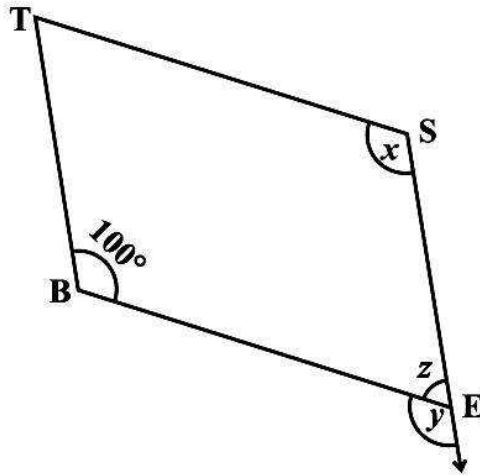
16. Construct a quadrilateral ABCD where AB = 4.5 cm, BC = 5.5 cm, CD = 4 cm, AD = 6 cm and AC = 7 cm.

17. Find CI on Rs 8,000 for 1 year at 9% per annum compounded half yearly.

**18.** Solve: $5x+\dfrac{7}{2}=\dfrac{3}{2}x-14$

19. Find the smallest number by which 675 must be multiplied to obtain a perfect cube.

20. In the below Figure, BEST is a parallelogram. Find the values x, y and z.

21. Observe the histogram (see below Figure) and answer the questions given below.
(i) What information is being given by the histogram?
(ii) Which group contains maximum girls?
(iii) How many girls have a height of 145 cms and more?
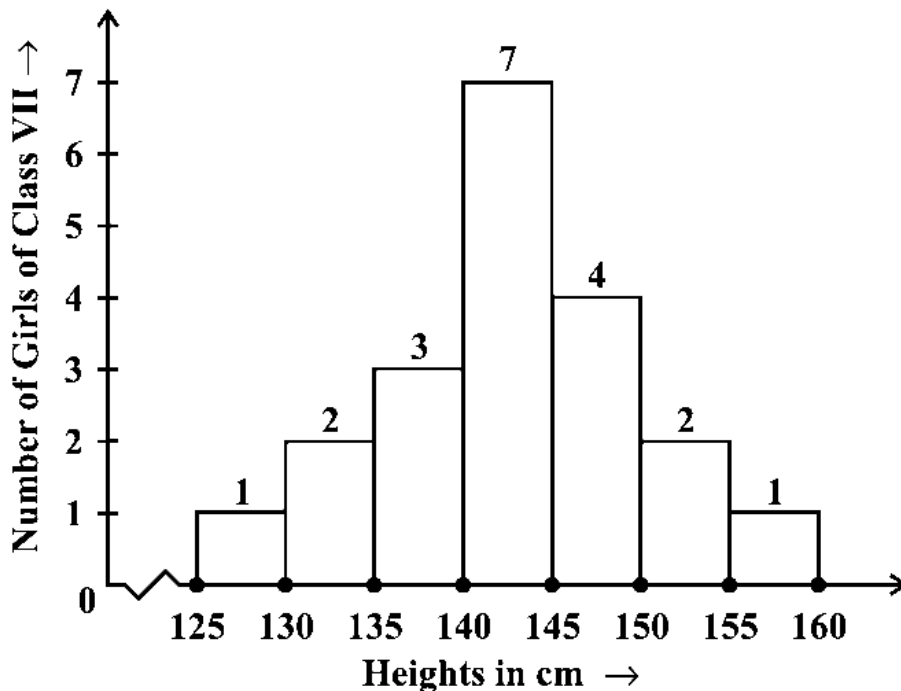
22. The students of Class VIII of a school donated Rs 2401 in all, for Prime Minister's National Relief Fund. Each student donated as many rupees as the number of students in the class. Find the number of students in the class.

<center>**SECTION – D**</center>

23. Sum of the digits of a two-digit number is 9. When we interchange the digits, it is found that the resulting new number is greater than the original number by 27. What is the two-digit number?

24. Construct a quadrilateral DEAR where DE = 4 cm , EA = 5 cm , AR = 4.5 cm , $\angle$E = 60° and $\angle$A = 90°

25. The population of a city was 20,000 in the year 1997. It increased at the rate of 5% p.a. Find the population at the end of the year 2000. Write any two effects of high populations?

26. The favourite flavours of ice-creams for students of a school is given in percentages as follows.
(i) Which flavour got the most percentage?
(ii) Find the central angle of each sector.
(iii) Draw a pie chart to show this information.

Flavours	Percentage of students preferring the flavours
Chocolate	50%
Vanilla	25%
Other flavours	25%