

Marks: 40

Class – VIII

Subject - Mathematics

Time: 90 mins

Instructions:

- i) Section-A comprises of 5 questions of 1 mark each.
- ii) Section-B comprises of 4 questions of 2 marks each.
- iii) Section-C comprises of 5 questions of 3 marks each.
- iv) Section-D comprises of 3 questions of 4 marks each.

Section-A

Choose the correct answer.

1. The additive inverse of $-6/-17$ is

- a) $6/17$ b) $-17/-6$ c) $-6/17$ d) $-17/6$

2. If $2t - 3 = 4$ then t is

- a) 7 b) $7/2$ c) $-7/2$ d) -7

3. How many diagonals does a triangle have

- a) 0 b) 1 c) 2 d) 4

4. The sum of the exterior angles of a quadrilateral is equal to

- a) 90° b) 360° c) 180° d) 45°

5. Which of the following statements is true ?

- a) All the rhombuses are squares b) Each parallelogram is a square
c) Each trapezium is a parallelogram d) Each square is a parallelogram

Section B

6. Represent $2/11$ and $-5/11$ on the number line

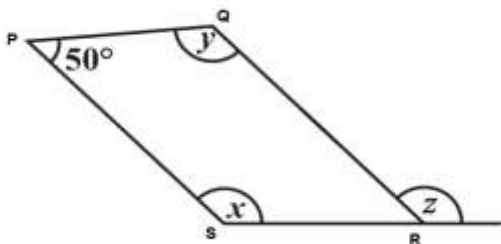
7. Solve $x/3 + 3/2 = -5/2$

8. An angle of a parallelogram measures 65° . Find the measures of the remaining angles.

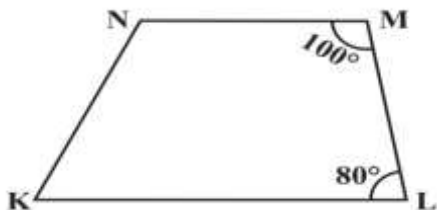
9. Find the number of sides of a regular polygon whose each exterior angle has a measure of 40° .

Section C

10. PQRS is a parallelogram. Find x, y and z.



11. Explain how this figure (KLMN) is a trapezium? Which of the two sides are parallel.



12. Construct a rhombus whose diagonals are 4.8cm and 6.2cm.

13. Find $\frac{2}{5} \times (-\frac{3}{7}) - \frac{1}{14} - \frac{3}{7} \times \frac{3}{5}$

14. Solve $\frac{n}{2} - \frac{3n}{4} + \frac{5n}{6} = 21$

Section D

15. Find 8 Rational numbers between $-\frac{2}{5}$ and $\frac{1}{2}$.

16. Pranay's father is seven times his age now. Two years later his father will be five times as old as his son will be. Find their present ages.

OR

A number consists of two digits in which the tens digit exceeds the units digit by 6. The number itself is equal to ten times the sum of digits. Find the number.

17. Construct a quadrilateral PQRS where $PQ=3.6\text{cm}$, $QR=3.8\text{cm}$, $RS=4.3\text{cm}$, $SP=4.8\text{cm}$ and $\angle R=60^\circ$. Write the steps of construction also.

