

Class: VIII

Marks: 40

Sub: MATHEMATICS

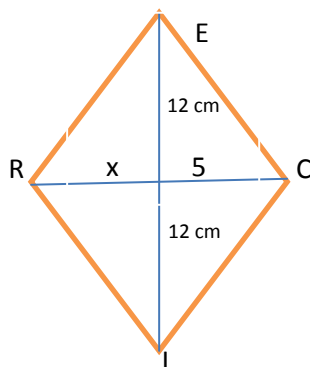
Duration: 90 Minutes

Instructions:

All questions are compulsory. Section A contains 5 questions of 1 mark each, Section B contains 4 questions of 2 marks each, Section C contains 5 questions of 3 marks each and Section D contains 3 questions of 4 marks each.

SECTION – A

- The additive inverse of the $-\frac{7}{19}$ is ____
 (a) $\frac{19}{7}$ (b) $\frac{7}{19}$ (c) $-\frac{7}{19}$ (d) 0 ()
- The product of $6/13$ and the reciprocal of $-\frac{7}{16}$ is ____
 (a) $-\frac{96}{91}$ (b) $\frac{96}{91}$ (c) $\frac{91}{96}$ (d) $-\frac{42}{16}$ ()
- The solution of $\frac{3}{7} + x = \frac{17}{7}$ is ____
 (a) $x = 14$ (b) $x = 2$ (c) $x = 10$ (d) $x = 4$ ()
- RICE is a Rhombus. The value of x in the figure is ____

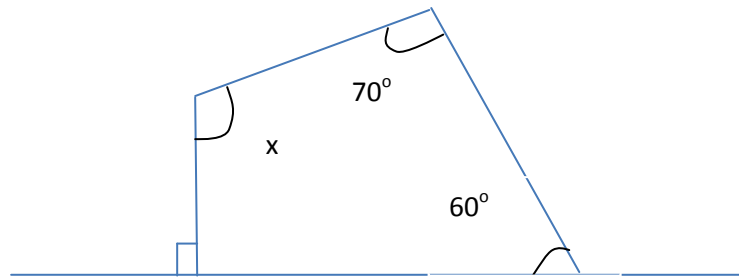


- (a) 5 (b) 12 (c) 13 (d) 10
- The name of the regular polygon of four sides is ____ ()
 (a) Triangle (b) Square (c) Rectangle (d) parallelogram

SECTION – B

- Find 3 rational numbers between $\frac{1}{4}$ and $\frac{1}{2}$
- Solve $\frac{8x-3}{3x} = 2$

8. Find the angle measure x in the following figure.



9. Some of two numbers is 95. If one exceeds the other by 15, find the number.

SECTION-C

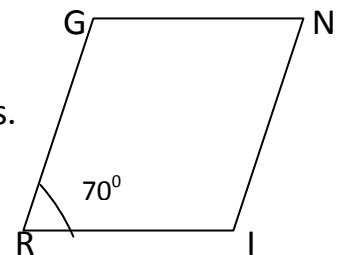
10. Represent $-\frac{2}{11}$, $-\frac{5}{11}$ on the number line.

11. The sum of three consecutive multiples of 8 is 888. Find the multiples.

12. The ages of Hari and Harry are in the ratio 5:7. Four years from now the ratio of their ages will be 3:4 .Find their present ages.

13. Find $\frac{-4}{5} \times \frac{3}{7} \times \frac{15}{16} \times -\frac{14}{9}$

14. In a Parallelogram RING, if $m \angle R = 70^\circ$, find all the other angles.

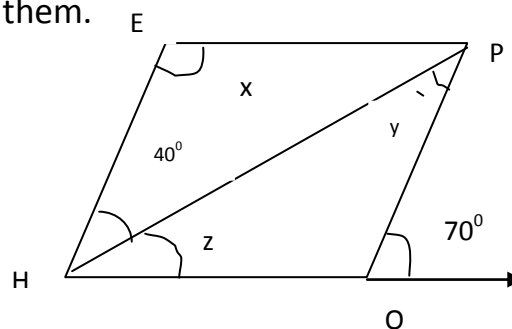


SECTION-D

15. Using appropriate properties , find $\frac{2}{5} \times -\frac{3}{7} - \frac{1}{6} \times \frac{3}{2} + \frac{1}{14} \times \frac{2}{5}$

16. Arjun is twice as old as Shriya. Five years ago his age was three times Shriya' s age. Find their present ages.

17. The adjacent figure HOPE is a Parallelogram. Find the angle measures x, y, and z State the properties used to find them.



Identify all the quadrilaterals that have (a) 4 sides of equal length (b) 4 Right angles and show them with figures.

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SECTION – A

1. b
2. a
3. b
4. a
5. b

SECTION – B

- | | |
|--|----------|
| 6. For making denominator same | ½ mark |
| For writing 3 rational nos. | 1 ½ mark |
| 7. $8x - 3 = 6x$ cross multiplication | ½ mark |
| For correct steps & for correct answer | 1 ½ mark |
| 8. For some of four angles in a quadrilateral is 360° | ½ mark |
| For correct steps and for finding value of x | 1 ½ mark |
| 9. Forming two numbers --- x, x+15 | 1 mark |
| Finding the numbers | 1 mark |

SECTION – C

- | | |
|--|-----------|
| 10. For drawing number line | 1 mark |
| For correct representation | 2 marks |
| 11. If x is a multiple of 8, the next multiples are x+8 and x+16 | 1 mark |
| $X + (x+8) + (x+16) = 888$ | |
| For solving x | ½ mark |
| $X = 288, x+8 = 296, x+16 = 304$ | 1 ½ marks |
| 12. Let the ages of Hari & Harry are 5x, 7x | 1 mark |
| According to the problem, $(5x + 4) \div (7x + 4) = \frac{3}{4}$ | 1 mark |
| For solving and correct answer | 1 mark |

13. For simplification & correct answer each 1 mark

Answer is $\frac{1}{2}$

14. $LR = LN = 70^\circ$ (Opposite angles of a parallelogram) 1 mark

LR and LI are (supplementary angles) 1 mark

$LI = 180^\circ - 70^\circ = 110^\circ$ 1 mark

SECTION – D

15. For each correct simplification and correct property 1 mark each

16. Let the age of Shriya is x years. $\frac{1}{2}$ mark

Age of Arjun $2x$ years 1 mark

ATP. $2x - 5 = 3(x-5)$ 1 mark

For finding x and correct answer 1 $\frac{1}{2}$ marks

17. $40^\circ + z = 70^\circ$ (corresponding angles of parallel lines HE & OP) 1 $\frac{1}{2}$ mark

$z = 30^\circ$

$Y = 40^\circ$ (Alternate interior opposite angles of parallel lines HO & EP) 1 mark

Linear pair $180^\circ - 70^\circ = 110^\circ$ $\frac{1}{2}$ mark

Therefore $x = 110^\circ$ (Opp. Angles of parallelogram are equal) 1 mark

(OR)

Ans: Square and Rhombus including figures 2 marks

Square and Rectangle including figures 2 marks

18.