

# KENDRIYA VIDYALAYA SANGATHAN

## HYDERABAD REGION

### COMMON FORMATIVE ASSESSMENT – I

Class: VIII

Marks: 40

Sub: MATHEMATICS

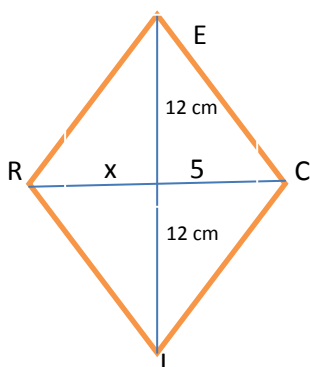
Duration: 90 Minutes

#### 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

1. The additive inverse of the  $-\frac{7}{19}$  is \_\_\_\_  
(a)  $\frac{19}{7}$  (b)  $\frac{7}{19}$  (c)  $-\frac{7}{19}$  (d) 0 ( )
2. 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)  $-\frac{42}{16}$  ( )
3. The solution of  $\frac{3}{7} + x = \frac{17}{7}$  is \_\_\_\_  
(a)  $x = 14$  (b)  $x = 2$  (c)  $x = 10$  (d)  $x = 4$  ( )
4. RICE is a Rhombus. The value of x in the figure is \_\_\_\_

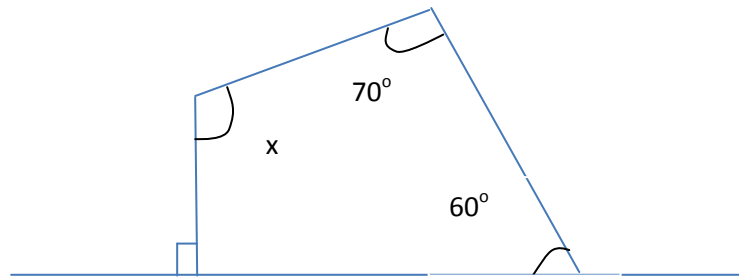


- (a) 5 (b) 12 (c) 13 (d) 10
5. The name of the regular polygon of four sides is \_\_\_\_ ( )  
(a) Triangle (b) Square (c) Rectangle (d) parallelogram

#### SECTION – B

6. Find 3 rational numbers between  $\frac{1}{4}$  and  $\frac{1}{2}$
7. 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

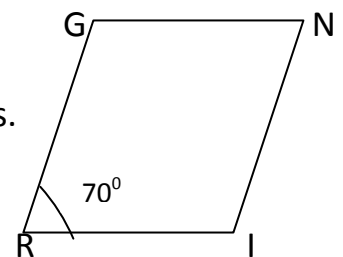
10. Represent  $-\frac{2}{11}$  ,  $-\frac{5}{11}$  on the number line.

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  $\frac{-4}{5} \times \frac{3}{7} \times \frac{15}{16} \times \left(-\frac{14}{9}\right)$

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

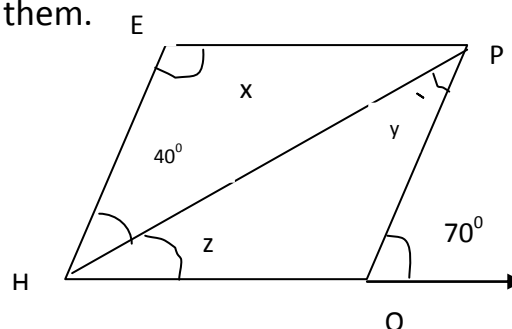


### SECTION-D

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

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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### SCORING KEY FOR COMMON FORMATIVE ASSESSMENT – I – 2014-2015

**Class: VIII**

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**Duration: 90 Minutes**

#### 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 $360^\circ$ | 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