

INDIAN SCHOOL SOHAR  
SUMMATIVE ASSESSMENT1- 2013-14  
MATHEMATICS

Date: 19/092013

Marks: 60

Class: VIII

Time: 2 hours

## SECTION-A

(Each question carries 1 mark)

To fill up the blanks choose the most suitable answers from the options given.

1. i) The number \_\_\_\_\_ is the identity of multiplication of rational numbers.

- a) 0      b) 1      c) 2      d) -1

ii) The additive inverse of  $\frac{7}{10}$  is \_\_\_\_\_.

- a)  $\frac{10}{7}$       b)  $\frac{-10}{7}$       c)  $\frac{-7}{10}$       d) 1

iii) The solution of the equation  $x - 5 = 12$  is \_\_\_\_\_.

- a) 17      b) -17      c) 7      d) -7

iv) The solution of the equation is  $\frac{x}{3} = 24$  is \_\_\_\_\_.

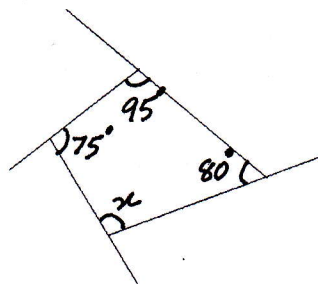
- a) 8      b) 72      c) 21      d) 27

v) The sum of the exterior angles of a hexagon is \_\_\_\_\_.

- a)  $180^\circ$       b)  $540^\circ$       c)  $270^\circ$       d)  $360^\circ$

vi) The value of  $x$  in the figure is \_\_\_\_\_

- a)  $110^\circ$       b)  $95^\circ$       c)  $90^\circ$       d)  $120^\circ$



vii) When a die is thrown the probability of getting a number not greater than 5 is \_\_\_\_\_.

- a)  $\frac{1}{6}$       b)  $\frac{2}{3}$       c)  $\frac{5}{6}$       d)  $\frac{1}{3}$

viii) Among the following numbers, \_\_\_\_\_ is not a perfect square.

- a) 7056    b) 6400    c) 5157    d) 3136

ix) The area of a square is 441sq.cm, and then its side will be \_\_\_\_\_ cm.

- a) 220.5 cm    b) 21cm    c) 44.1cm    d) 110cm

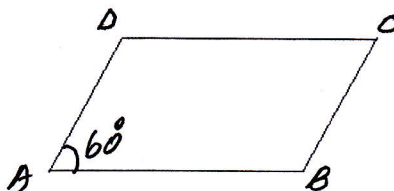
x) The one's digit of the cube of 678923 will be \_\_\_\_\_.

- a) 7    b) 3    c) 9    d) 6

### SECTION-B

(Each question carries 2 marks)

2. Represent the numbers  $\frac{-3}{4}$ ,  $\frac{-1}{2}$ ,  $\frac{-1}{4}$ , 0, and  $-1$  on a number line. (Only one number line to be made).
3. The cost of  $2\frac{1}{3}$  meters of cloth is Rs  $75\frac{1}{4}$ . Find the cost of 1 metre cloth.
4. Solve the equation  $\frac{x}{2} + \frac{x}{3} - \frac{x}{4} = 7$
5. How many sides does a regular polygon have if the measure of each of its interior angle is  $175^\circ$ ?
6. One of the angles of the parallelogram ABCD is  $60^\circ$ . Find the measures of the other angles of the parallelogram. Give reasons for the steps involved.



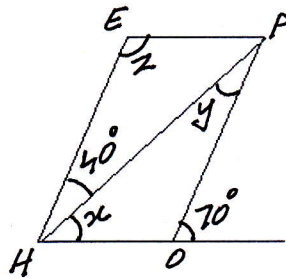
7. Find a Pythagorean triplet whose one member is 50.
8. Find the smallest number by which 3645 must be divided so that we get a perfect square.
9. Find the smallest number by which 2560 must be divided so that the quotient is a perfect cube.

### SECTION-C

(Each question carries 3 marks)

10. Find the value using distributive property  $\left\{\frac{7}{5} \times \left(\frac{-3}{12}\right)\right\} + \left\{\frac{7}{5} \times \frac{5}{12}\right\}$
11. The numerator of a fraction is 4 less than the denominator. If 1 is added to both its numerator and denominator the fraction becomes  $\frac{1}{2}$ . Find the original fraction.

12. In parallelogram HOPE, find the measures of angles  $x$ ,  $y$  and  $z$ . Give reasons for the steps involved.



13. Construct a quadrilateral XYZW in which  $XY = 5\text{cm}$ ,  $YZ = 6\text{cm}$ ,  $ZW = 7\text{cm}$ ,  $WX = 3\text{cm}$  and  $XZ = 9\text{cm}$ .

14. Form a grouped frequency distribution table from the following data by taking 10-15, 15-20, etc as intervals.

31, 23, 19, 29, 22, 20, 16, 10, 13, 34, 38, 33, 28, 21, 15, 18, 36, 24, 18, 15, 12, 30, 27, 23, 20, 17, 14, 32, 26, 25, 18, 29, 24, 19, 16, 11, 22, 15, 17, 10.

15. Find the square root of 27225 by prime factorization.

#### SECTION-D

(Each question carries 4 marks)

16. A sum of Rs800 is in the form of denominations of Rs 10 and Rs 20. If the total number of notes is 50, find the number of notes of each type.

17. Construct a quadrilateral ABCD, with  $AB = 5.6\text{cm}$ ,  $BC = 4.1\text{cm}$ ,  $CD = 4.4\text{cm}$ ,  $AD = 3.3\text{cm}$ , and  $\angle A = 75^\circ$ .

18. The following is the distribution of weights (in kg) of 50 persons. Draw a histogram to represent the data.

Weight (In Kg)	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90
No. of persons	12	8	5	4	5	7	6	3

19. Find the cube root of 157464 by prime factorization method.

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