



SUMMATIVE ASSESSMENT - I
MATHEMATICS
SET - A

Class: VII
Date: 7.9.2015

Maximum Marks: 90
Time allowed: 3 hours

General Instructions:

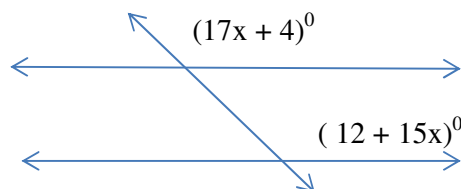
- This question paper contains 26 questions and 4 printed pages.
- All the questions are compulsory.
- Marks for each question are indicated against it.

1. a. The sum of -40 and 40 is _____. 1
i. -80 ii. 0 iii. 80 iv. 40
- b. 234 grams when expressed in kilograms is _____. 1
i. 234kg ii. 0.234 kg iii. 23.4kg iv. 0.0234kg
- c. A line segment that joins a vertex to the midpoint of the opposite side in a triangle is called its _____. 1
i. altitude ii. bisector iii. median iv. base
- d. Difference between 43°C and -17°C is _____. 1
i. -26°C ii. -60°C iii. 60°C iv. 26°C
- e. The predecessor of zero is _____. 1
i. 0 ii. -1 iii. 1 iv. -2
- f. If Rs 26 are divided into 4 equal parts, each part would be _____. 1
i. Rs 5.5 ii. Rs 6.50 iii. Rs 6 iv. Rs 4.60
- g. On a number line $11/5$ will lie between _____. 1
i. 0 and 1 ii. 1 and 2 iii. 2 and 3 iv. 0 and -1
- h. An angle is equal to its complement. What is its magnitude? 1
i. 45° ii. 90° iii. 60° iv. 120°
- i. The angles of a triangle are in the ratio 1 : 1 : 2. What kind of triangle is it? 1
i. An Obtuse angled
ii. Right Isosceles triangle
iii. Acute angled
iv. Equilateral triangle.
- j. Which one of the following is a vulgar fraction? 1
i. $\frac{3}{18}$ ii. $\frac{14}{20}$ iii. $\frac{9}{10}$ iv. $\frac{24}{1000}$
- k. The multiplicative inverse of -1 is _____. 1
i. -1 ii. 1 iii. 0 iv. 2



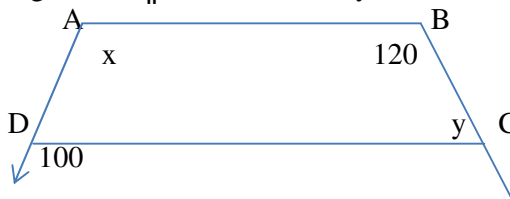
1. The number of faces, edges and vertices in a cube are respectively _____ 1
- i. 6, 12, 8 ii. 2, 1, 1 iii. 6, 10, 9 iv. 8, 12, 8
- m. If $a = b$ then $a/x = ?$ 1
- i. bx ii. $-x$ iii. $b+x$ iv. b/x
- n. Which of the following pairs of angles is not equal when a transversal cuts 2 parallel lines? 1
- i. Vertically opposite angles
 ii. Co-interior angles
 iii. Alternate interior angles
 iv. Corresponding angles
- o. A triangular prism has _____ faces. 1
- i. 3 ii. 4 iii. 5 iv. 6
- p. If $27 = 7x - 1$, then the value of x is _____. 1
- i. 5 ii. 4 iii. 1 iv. 6
- q. If one fourth of two fifths of a number is 36, the number is _____. 1
- i. 340 ii. 360 iii. 720 iv. 240
- r. The median of 1, 6, 4, 8, 2, 9 is _____. 1
- i. 4 ii. 6 iii. 4.5 iv. 5
- s. A 3-D figure with a rectangular base and side faces made of triangles is called a _____ 1
- i. prism
 ii. square pyramid
 iii. rectangular pyramid
 iv. triangular pyramid
- t. The mean of first four prime numbers is _____. 1
- i. 4 ii. 4.25 iii. 6.5 iv. 4.5

2. The mean of 6 numbers is 52. If one more number is included the mean of new set of numbers becomes 54. Find the included number. 2
3. In a test containing 10 questions, 5 marks are awarded for every correct answer, (-1) for every incorrect answer and 0 for not attempting the question. Find score of Rashid if he gets 4 correct and 6 incorrect answers. 2
4. The sum of two consecutive even numbers is 70. Find the numbers. 2
5. In the given figure, find the value of x . 2





6. There are 126 students in a class. The number of boys is $\frac{3}{4}$ th the number of girls. Find the number of girls. 2
7. Draw the nets of
 a. cylinder. 2
 b. cube.
8. Frame two equations for the solution $m = -5$. 2
9. Represent $\frac{-3}{2}$ on a number line. 2
10. Rahul plants 8 saplings in a row in his garden. The distance between two adjacent saplings is $\frac{1}{2}$ m. Find the distance between the first and the last sapling. Why is planting saplings essential for us? Mention two reasons. 2
11. A man goes 7m due West then 24m due North. How far is he from the starting point? 2
12. Simplify the given mathematical expression using BODMAS.
 $83 - [29 - \{6 \div 3 - (6 - 9 \div 3) \div 3\}]$ 3
13. In a class of 45 students, $\frac{2}{5}$ of the total number of students play cricket, $\frac{1}{3}$ of the total number of students play football and the rest play tennis.
 a. How many students play cricket? 3
 b. How many students play football?
 c. What fraction of the total number of students play tennis?
14. 45 kg of rice costs Rs 900. If this rice was divided among 24 people, how much rice will each person get? What was the cost of rice for each person? 3
15. A man reared cows and buffaloes. The number of buffaloes was 7 more than one third of the number of cows. What was the total number of animals, if the number of buffaloes was 21? 3
16. In the given figure $AB \parallel DC$. Find x and y . 3



17. A 10m ladder is placed against a wall. The base of the ladder is 6m from the wall. How far up the wall does the top of the ladder reach? 3
18. The heights of 5 friends (in cm) in a group are given as follows:
 175, 172, 181, 167, 180 3
- a. What is the mean height?
 b. How many friends have height more than the mean height?
 c. The friend who is 167 cm tall leaves the group. What is the new mean height of the remaining friends?



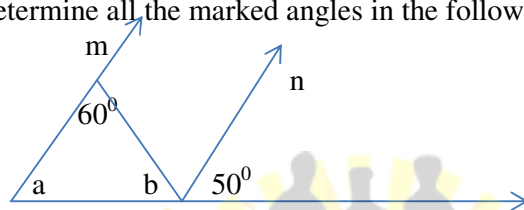
19. Ravi donates 0.2 part of his salary every month to a charitable trust. If his monthly salary is Rs 21,500, how much amount will he donate in one year? Which value does Ravi show by this gesture? 3

20. Name the following: 3
 a. A pyramid with 5 faces.
 b. A solid with 4 vertices.
 c. A solid which has 1 face, no vertex, no edge.

21. The angles of a triangle are in the ratio 3: 4: 2. Find the measure of each angle of the triangle. 3

22. The total cost of 3 tables and 2 chairs is Rs 745. If one table costs Rs 40 more than one chair, find the price of each. 4

23. Determine all the marked angles in the following figure in which $m \parallel n$. 4



24. From a starting point A, Rahul walks $\frac{3}{4}$ km towards east and then $\frac{6}{7}$ km towards west to reach point C. Where will he be now from the starting point A? 4

25. A first aid kit has 2 ointments for Rs 11.35 each, 5 bandages for Rs 3.60 each, 3 antiseptic lotions for Rs 37.80 each and a pair of scissors for Rs 23.50. The box costs Rs 50.40. How many such first aid boxes can be purchased for Rs 4,560? 4

26. The given table shows marks obtained by Riya and Siya in their semester exams. Represent the given data on a double bar graph and find the average marks scored by both the girls and compare their performance. 4

	English	Hindi	Maths	Science	Social Science
Riya	80	85	85	90	75
Siya	75	75	85	80	85