SUMMATIVE ASSESSMENT -1. **SEPTEMBER-2017**

Date : / / 2017 **8th Standard** **Marks : 40**

Time: 90 minutes **Mathematics**

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I. choose the correct alternative and write the complete answer along with its letter in the space provided . **1 x 4 = 4**

(1) The general form of 132 is .....

(a) (2 x 100)+ (3 x10) + (1 x 1) **(b) (1 x 100) + (3 x 10) + (2 x 1)**

(c) (1 x 100) + (2 x 10) + (3 x 1) **(d) (2 x 100) + (1 x 10) + (3 x 1)**

(2) 23^2 = ...

(a) 729 (b) 629 (c) 429 (d) 529

(3) Factors of $a^2 - b^2$ = ...

(a) (a+b)(a+b) (b) (a-b)(a-b) (c) (a+b)(a-b) (d) (a+a)(b-b)

(4) The coefficient of ab in -9ab is .....

(a) 9 (b) -9 (c) ab (d) -9a

II.Fill in the blank places. **1 x 3 = 3**

(5) If two angles are complementary , then their sum is ,.....

(6) Add $7a^2b$ and $12a^2b$,.....

(7) $(a + b)^2$ = ...

III.Answer the following **2 x 8 = 16**

(8) Find the digits represented by the letters.

$$\begin{array}{r} 2\ A \\ \times\ A \\ \hline 1\ 2\ A \end{array}$$

(9) Using the numbers from 7 to 15 construct 3 x 3 magic square

(10) Find the square root of 5929 by factorization.

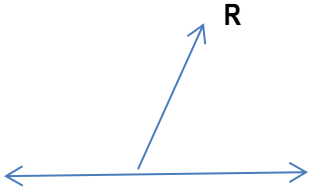
(11) Find the least positive integer with which you have to multiply 243 to get a perfect cube ,?

(12) Solve $8x - 3 = 9 - 2x$

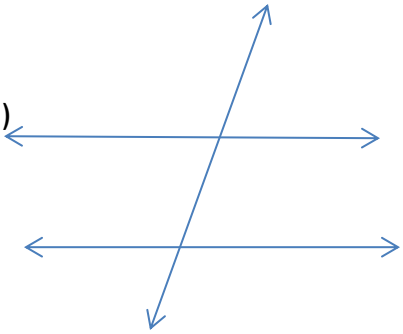
(13) If the perimeter of a triangle is 22 cm and the sides are $x + 4$, $3x + 1$ and $4x + 1$. Find x.

(14) Recognise the type of angles in the following figures ,.

(a) R



(b)



(15) An exterior angle of a triangle is 100° and one interior opposite angle is 45° . Find the other two angles of the triangle ?

IV.Answer the following 3 x 3 = 9

(16) Factorise (a) $a^2 + ab$ (b) $a^2 + 5a + 6$

(17) Prove that " In any triangle , the sum of the three interior angles is 180 °.

(18) Find the sum of 1 + 3 + 5 + ...+ 51. (The sum of all odd numbers from 1 to 51) without actually adding them.

V Answer the following 2 x 4 = 8

(19) Use the Identity and compute . (a) $(3a - 5b)^2$ (b) $(3x + 4) (3x + 5)$.

(20) Draw the diagrams illustrating each of the following situations .

(a) Three straight lines which do not pass through a fixed points .

(b) Straight angle .

(c) Reflex angle.

(d) A transversal cuts at two distinct straight lines.