NEW AL WUROOD INTERNATIONAL SCHOOL, JEDDAH,KS.A

Affiliated to CBSE – New Delhi

REVISION WORK SHEET -2(2017 -2018)

CLASS: 10.

Subject: MATHEMATICS

1.. If α, β are the zeros of the polynomial $kx^2 + 4x + 4$, then find the value of k so that $(\alpha+\beta)^2 - 2\alpha\beta = 24$

2. If two zeros of the polynomial $ax^3 + 3x^2 - bx - 6$ are -1 and -2. Find the third zero and the values of a and b .

.3. It can take 12 hours to fill a swimming pool, using two pipes. If the larger pipe is used for 4hours and smaller pipe for 9hours only half the pool can be filled. How long will take each pipe to fill the pool separately.

4. . Aruna has only Re 1 and Rs 2 coins with her. If the total number of coins that she has is 50 and the total Amount of money is Rs 75, find the number of Re1 and Rs 2 coins.

5. One equation 0f a pair of dependent linear equations is -5x+7y=2.The second equation can be

a) 10x-14y=-4 b) -10x-14y+4=0 c) -10x+14y+4=0 d) 10x+14y=-4

6. The angles of a cyclic quadrilateral are angle $A=(x+y+10)^0$, angle $B=(y+20)^0$,

angle $C=(x+y-30)^0$ and Angle $D=(x+y)^0$. Find them

7. A boat can go 30km upstream and 44km downstream in 9 hours. The same boat can cover35km upstream and 66km downstream in 11hours. Find the speed of the stream and speed of the boat

8.The arithmetic mean of a set of 40 values is 65. If each of the 40 values is increased by 5, what will be the mean of the set of new values

9.. Construct a more than cumulative frequency distribution table for the given data

Weight in kg	50-60	60-70	70-80	80-90	90-100	100-110
No. of students	13	15	17	21	23	19

10. The median and mode of the distribution are 21.2 and 2.1 respectively , then find the value of its mean?

11.Find the mode of the following data

Class	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	4	7	9	11	6	2

12.. If the median of the following frequency distribution table is 46, find the missing frequencies

Class	10-20	20-30	30-40	40-50	50-60	60-70	70-80	TOTAL
Frequency	12	30	F1	65	F2	25	18	229

13. . Sean has 8-inch pieces of toy train track and Ruth has 18-inch pieces of train track. How many of each piece would each child need to build tracks that are equal in length?

14. Show that only one of n, n+2, or n+4 is divisible by 3 where n is a positive integer

15. Use Euclid's division Algorithm to show that the cube of any positive integer is either of the form 9q, 9q+1,or 9q+8.

16. State and prove Pythagoras theorem.

17.Change the data given below to a more than type, less than type frequency distribution. Draw the ogives and find median from it.

Class	0-10	10-20	20-30	30-40	40-50
No. of student	2	4	6	7	3

18.Show that $\frac{1}{2}$ and $\frac{-3}{2}$ are the zeroes of the polynomial $4x^2 + 4x - 3$ and verify the relationship between zeroes and co-efficient of polynomial.

19.Solve $6x + 3y = 6xy$, $2x + 4y = 5xy$.

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