Worksheet-15Subject: - MathematicsClass: - VITeacher: - Mrs. Poonam SunilName: ______ Class & Sec: ______ Roll No. _____ Date: 22.05.2020

Good Morning Students! In the previous class, I have discussed prime and composite numbers. Today we will do Ex- 3.2

Q3: The number 13 and 31 are prime number. Both these numbers have same digits 1 and 3. Find such pairs of prime numbers up to 100.

Solution: (17, 71), (37, 73) and (73, 97)

Q4: Write down separately the prime and composite numbers less than 20. Solution: Prime numbers from 1 to 20 are 2, 3, 5, 7, 11, 13, 17 and 19 Composite numbers from 1 to 20 are 4, 6, 8, 9, 10, 12, 14,15, 16, 18

Q5: What is the greatest prime number between 1 and 10?

Ans: Greatest prime number between 1 and 10 is 7.

Q6: Express the following as the sum of two odd prime.

Solution:

(a) 44 = 3 + 41
(b) 36 = 7 + 29
(c) 24 = 5 + 19
(d) 18 = 5 + 13

Q7: Give three pairs of prime numbers whose difference in 2. [Remarks: Two prime numbers whose difference is 2 are called twin primes] **Solution**: (17, 19), (29, 31), (71, 73)

Q8: Which of the following numbers are prime?

- a) 23 \rightarrow Prime Number
- b) 51 \rightarrow Composite Number
- c) 37 \rightarrow Prime Number
- d) 26 \rightarrow Composite Number

Q9: Write seven consecutive composite numbers less these 100 so that there is no prime number between them.

Solution: 90, 91, 92, 93,94, 95 and 96

Q10: Express each of the following numbers as the sum of three odd prime:

- a) 21 = 3 + 7 + 11
- b) 31 = 7 + 11 + 13
- c) 53 = 13 + 17 + 23
- d) 61 = 7 + 23 + 31

Q11. Write three pairs of prime numbers less than whose sum is divisible by 5. (Hint: 3 + 7 = 10) (2 + 3 = 5), (3 + 17 = 20), (3 + 7 = 10)

Q12. Fill in the blanks:

- a) A number which has only two factors is called a prime number.
- b) A number which has more than two factors is called a <u>composite number</u>.
- c) 1 is neither prime nor composite.
- d) The smallest prime number is <u>2</u>.
- e) The smallest composite number is <u>4</u>.
- f) The smallest even number is <u>2</u>.

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Today's class is over. I hope you understand it. Next I will meet you on Tuesday. Good bye children! (STAY FIT AND STAY HEALTHY)