

Prime & Composite Numbers

1. Write T for true and F for false statement.

a. 1 is the smallest prime number.

b. Every natural number is either prime or composite.

c. The product of a prime number and an even number is also a prime number.

d. Two prime numbers are always co-prime but two co-prime numbers need not be prime.

e. As number 2 has only one factor so it is neither prime nor composite number.

2. What are prime numbers? Write first ten prime numbers.

3. How many even numbers are prime numbers?

4. What do you mean by the term triplet? Give example.

5. What are composite numbers? Can a composite number be odd?

6. What are co-primes? Give examples in your support.

7. Write seven consecutive numbers less than 100 so that there is no prime number between them.

8. Write a pair of twin primes between 40 and 50.

9. For a number greater than 10 to be a prime, what may be the possible digits in the units place?

10. Express the following composite numbers as sum of two or three prime numbers.

- a. $17 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$
- b. $34 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$
- c. $48 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$
- d. $59 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$

11. Express the following as the sum of two odd prime numbers.

- a. $10 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$
- b. $14 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$
- c. $40 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$
- d. $52 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$

12. Express each of the following numbers as the sum of three odd primes.

a. 35 = _____ + _____ + _____

b. 43 = _____ + _____ + _____

c. 57 = _____ + _____ + _____

d. 21 = _____ + _____ + _____

13. Fill in the blanks with prime numbers less than 40. Whose sum is divisible by 5?

a. _____ + _____ = 15

b. _____ + _____ = 30

c. _____ + _____ = 20

d. _____ + _____ = 40

14. Which of the following numbers are prime:

a. 307

b. 129

c. 397

d. All of these