

**Co-prime numbers**

Any set of numbers which do not have any other common factor other than 1 are called co-prime or relatively prime numbers.

E.g. Factors of 5 = 1, 5

Factors of 6 = 1, 2, 3, 6

This shows that 5 and 6 have no common factor other than 1. Therefore, they are co-prime numbers.

Properties of co-prime numbers:

* All prime numbers are co-prime to each other.
* Any consecutive whole numbers are always co-primed.
* Sum of any two co-prime numbers is always co-primed.
* Co-prime numbers need not to be prime numbers.

**Twin primes**

* Twin primes are a pair of primes which differ by 2. First few twin primes are
* E.g. (3, 5); (5, 7); (11, 13); (17, 19); (29, 31); (41, 43)

**Question :**Express 44 as the sum of two odd primes.

***Solution***: 44 = \_\_\_\_  + \_\_\_\_

* Here we have to find 2 numbers which are odd as well as prime numbers and whose sum is 44.
* Odd prime numbers upto 44 are 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43.
* Now let’s find out a pair of numbers whose sum is 44.
* Sum of 3 and 41 is 44.
* So, 44 = 3 + 41

**Question:**Give three pairs of prime numbers whose difference is 2.

***Solution***: 5 and 7, 11 and 13, 41 and 43.