

EXERCISE – 2D

Q-1. How many prime numbers exists between –

- a. 1 and 10 = Prime numbers = 2 , 3 , 5 , 7 = 4 numbers
- b. 1 and 20 = Prime numbers = 2 , 3 , 5 , 7 , 11 , 13 , 17 , 19 = 8 numbers
- c. 20 and 40 = Prime numbers = 23 , 29 , 31 , 37 = 4 numbers
- e.. 80 and 100 = 83 , 87 , 89 = 3 numbers

Q-2. Fill in the boxes –

- a. Even
- b. Even
- c. Odd
- d. Even
- e. Odd
- f. Even

Q-4. Which of the following pair of numbers are co prime numbers –

- a. 52 and 81 $52 = 2 \times 2 \times 13 \times 1$
 $81 = 9 \times 9 \times 1$

The common factor between them is 1 , so they are co-prime numbers

- c.. 88 and 187 $88 = 2 \times 2 \times 2 \times 11 \times 1$
 $187 = 11 \times 17 \times 1$

The common factor between them is 11 and 1 , so they are not co-prime numbers

- d. 675 and 392 $675 = 3 \times 3 \times 3 \times 5 \times 5 \times 1$
 $392 = 2 \times 2 \times 2 \times 7 \times 7 \times 1$

The common factor between them is 1 , so they are co-prime numbers

Q-5. Write the prime numbers from 1 to 100 whose unit place is -

- a. Unit place 1 = 11 , 31 , 41 , 61 , 71
- b. Unit place 3 = 3 , 13 , 23 , 43 , 53 , 73 , 83
- c. Unit place 5 = 5
- d. Unit place 7 = 7 , 17 , 37 , 47 , 67 , 97

Q-6. Which are the pairs of twin prime from 1 to 100 ?

Sol : Twin primes between 1 to 100

(3 , 5), (5 ,7) , (11 , 13) , (17 ,19) , (29 ,31) , (41, 43) , (59 ,61) , (71 , 73)

EXERCISE – 2E

Q-1. Which of the following no are divisible by 2?

Divisible by 2 : A number is divisible by 2 if the digit at the ones place is 0 , 2 , 4 , 6 , or 8

a. 362

= In 362 the unit digit is 2 , so 362 is divisible by 2

b. 731

= In 731 the unit digit is 1 , so 731 is not divisible by 2

c. 895

= In 895 the unit digit is 5 , so 895 is not divisible by 2

f.. 812

= In 812 the unit digit is 2 , so 812 is divisible by 2

h.. 5818

= In 5818 the unit digit is 8 , so 5818 is divisible by 2

Q-2. Which of the following no are divisible by 3?

Divisible by 3 : A number is divisible by 3 if the sum of the digits of a number is divisible by 3.

a. 231

In 231 the sum of the digits is $2 + 3 + 1 = 6$, 6 is divisible by 3 . Hence 231 is divisible by 3

b. 343

In 343 the sum of the digits is $3 + 4 + 3 = 10$, 10 is not divisible by 3 .
Hence 343 is not divisible by 3

c. 861

In 861 the sum of the digits is $8 + 6 + 1 = 15$, 15 is divisible by 3 . Hence
861 is divisible by 3

e.. 61

In 61 the sum of the digits is $6 + 1 = 7$, 7 is not divisible by 3 . Hence 61
is not divisible by 3

Q-3. Which of the following no are divisible by 4?

Divisible by 4 : A number is divisible by 4 if the number formed by the last two digits of the number is divisible by 4.

a. 132

In 132 last two digits 32 is divisible by 4 . Hence 132 is divisible by 4

c.. 382

In 382 last two digits 82 is not divisible by 4 . Hence 382 is not divisible
by 4

d. 1236

In 1236 last two digits 36 is divisible by 4 . Hence 1236 is divisible by 4

e.. 7141

In 7141 last two digits 41 is not divisible by 4 . Hence 7141 is not
divisible by 4

Q-4. Which of the following no are divisible by 5?

Divisible by 5 : A number is divisible by 5 if the unit digit of the number is either 5 or 0.

a. 375

In 375 , the unit digit is 5 . Hence 375 is divisible by 5

b. 25

In 25 , the unit digit is 5 . Hence 25 is divisible by 5

c. 83

d. In 375 , the unit digit is 5 . Hence 375 is divisible by 5

In 83 , the unit digit is 3 . Hence 83 is not divisible by 5

e.. 70004

In 70004 , the unit digit is 4 . Hence 70004 is not divisible by 5