TEST 2

1. Find 31 + 32 + 33 + …+ 59 + 60.

1.1365 2. 1830 3. 1225 4. 1355

1. The number 54x62 is divisible by 9. Find the value of x.
2. 0 2. 1 3.2 4. 3
3. The number 7684x91 is divisible by 11. Find the value of x.
4. 1 2. 2 3. 3 4. 4
5. For a school gathering, 40 students with roll numbers 1 to 40 brought chocolates. All students with odd roll numbers brought as many chocolates as their roll numbers and all students with even roll numbers brought as many chocolates as the squares of their roll numbers. Find the total number of chocolates brought.
6. 11440 2. 11480 3. 3170 4. 11880
7. In a party of 40 people, everyone shakes hands with all the other persons exactly once. What is the total number of handshakes happening?
8. 780 2. 820 3. 860 4. 900
9. The sum of two natural numbers is 32. Find their maximum product.
10. 35 2. 255 3. 256 4. 289
11. A gardener planted trees in rows and columns. The number of rows was 3 less than the number of columns and the total number of rows and columns is 27. Find the total number of trees planted.
12. 150 2. 180 3. 210 4. 240

**8. What is the largest 4 digit number exactly divisible by 88?**

A) 9944

B) 9900

C) 9988

D) 9999

### 9. ****{(481 + 426)2 - 4 × 481 × 426} = ?****

A) 3210

B) 4200

C) 3025

D) 3060

### 10. ****A number when divided by a divisor leaves a remainder of 24. When twice the original number is divided by the same divisor, the remainder is 11. What is the value of the divisor?****

 A) 13

B) 59

C) 35

D) 37

### ****11. The product of 4 consecutive even numbers is always divisible by:****

A) 600

B) 768

C)  864

D) 384

12. In dividing a number by 585, a student employed the method of short division. He divided the number successively by 5, 9 and 13 (factors 585) and got the remainders 4, 8, 12 respectively. If he had divided the number by 585, the remainder would have been

1.24

2.144

3.292

4.584

13. What least number must be subtracted from 13601, so that the remainder is divisible by 87 ?

1, 23

2.31

3.29

4.37

14. It is being given that (232 + 1) is completely divisible by a whole number. Which of the following numbers is completely divisible by this number?

1.(216 + 1)

2.(216 - 1)

3.(7 x 223)

4.(296 + 1)

15. 1397 x 1397 = ?

1. 1951609

2. 1981709

3. 18362619

4. 2031719

16. Complete the given series

4, 6, 12, 18, 30, 42, 60, 72, 102, 108, ---

1. 114 2. 110 3. 138 4. 150

17. The sum of first 45 natural numbers is:

1. 1035

2. 1280

3. 2070

4. 2140

18.   
Which of the following number is divisible by 24 ?

1. 35718

2. 63810

3. 537804

4. 3125736

19. **If x and y are the two digits of the number 653 xy such that this number is divisible by 80, then  x + y = ?**  
(a) 2  
(b) 3  
(c) 4  
(d) 6

20. **On dividing a number by 5, we get 3 as remainder. What will be the remainder when the square of this number is divided by 5?**  
(a) 0  
(b) 1  
(c) 2  
(d) 4