

# Number Properties

## HCF & LCM



1. Find the least number which when divided by 16, 18, 20 and 25 leaves 4 as remainder in each case, but when divided by 7 leaves no remainder.

- (a) 8004      (b) 13004      (c) 18004      (d) 18014



2. What is the greatest number which divides 852, 1065 and 1491 exactly?

(a) 193

(b) 183

(c) 223

(d) 213



3. Find the greatest number which will divide 25, 73 and 97 so as to leave the same remainder in each case.

- (a) 12                      (b) 18                      (c) 24                      (d) 32



4. Find the side of the largest square slab which can be paved on the floor of a room 5 m 44 cm long and 3 m 74 cm broad.

- (a) 56 cm      (b) 42 cm      (c) 38 cm      (d) 34 cm



5. Find the greatest number of 4 digits which when divided by 10, 15, 21 and 28 leaves 4, 9, 15 and 22 as remainders respectively.

- (a) 9654      (b) 9666      (c) 9664      (d) 9864



6. Five bells begin to toll together and toll at intervals of 36, 45, 72, 81 and 108 seconds. After what interval of time will they keep tolling together?

- |               |               |
|---------------|---------------|
| (a) 3240 secs | (b) 3080 secs |
| (c) 3140 secs | (d) 3200 secs |



7. The least perfect square number which is divisible by  $3m$ ,  $4m$ ,  $5m$ ,  $6$  and  $8$  is

- (a) 900      (b) 1200      (c) 2500      (d) 3600





8. The HCF of two numbers is 11 and their LCM is 693. If one of the numbers is 77, find the other.

- (a) 909      (b) 119(c) 66      (d) 99



9. The sum of the HCF and LCM of two numbers is 680 and the LCM is 84 times the HCF. If one of the numbers is 56, find the other number.

- (a) 84                      (b) 12                      (c) 8                      (d) 96



10. The ratio of two numbers is 3:4. Their HCF is 4. Find the LCM.

(a) 12

(b) 16

(c) 24

(d) 48



11. Philip, Tom and Brad start jogging around a circular field and complete a single round in 18 secs, 22 secs and 30 secs respectively. In how much time will they meet again at the starting point?

(a) 3 min 15 secs

(b) 21 min

(c) 16 min 30 secs

(d) 12 min



12. The HCF of two numbers is 8. Which one of the following can never be their LCM?

- (a) 24                      (b) 48                      (c) 56                      (d) 60



13. Three numbers which are co-primes to each other are such that the product of the first two is 551 and that of the last two is 1073. Find the sum of the three numbers.

- (a) 75                      (b) 81                      (c) 85                      (d) 89



14. The sum of two numbers is 216 and their HCF is 27.  
Find the numbers.

(a) 27, 189

(b) 81, 189

(c) 108, 108

(d) 154, 162



15. HCF of 3240, 3600 and a third number is 36 and their LCM is  $2^4 \times 3^5 \times 5^2 \times 7^2$ . Find the third number.

- (a)  $2^2 \times 3^5 \times 7^2$                       (b)  $2^2 \times 5^3 \times 7^2$   
(c)  $2^5 \times 5^2 \times 7^2$                       (d)  $2^3 \times 3^3 \times 7^2$





16. The HCF and LCM of two numbers are 33 and 264. When the first number is divided by 2, the quotient is 33. Find the other number.

- (a) 66                      (b) 132                      (c) 198                      (d) 99



17. What is the greatest possible rate at which a man can walk 51 km and 85 km in an exact number of minutes?

- (a) 11 km/min                      (b) 13 km/min  
(c) 17 km/min                      (d) None of these



18. Find the greatest number of 5 digits that will give us a remainder of 5 when divided by 8 and 9 respectively.

- (a) 99931      (b) 99941      (c) 99725      (d) None of these



19. Two equilateral triangles have the sides of length 34 and 85 respectively. Find the greatest length of the rope that can measure both of them exactly. How many such equal parts can be measured?

- (a) 17, 21      (b) 19, 18      (c) 21, 14      (d) None of these



20. The sum of two numbers is 528 and their HCTF is 33.  
The number of pairs of such numbers satisfying the above  
condition is

- (a) 6                      (b) 12                      (c) 8                      (d) 4

