

1. The H.C.F. of any two prime numbers is  
(a) 0 (b) 1  
(c) 2 (d) Any natural number
2. The H.C.F. of 24 and 60 is  
(a) 4 (b) 6 (c) 12 (d) 2
3. Find the H.C.F. of 144 and 168.  
(a) 6 (b) 4 (c) 12 (d) 24
4. The H.C.F. of 16, 24 and 48 is:  
(a) 2 (b) 4 (c) 6 (d) 8
5. Find the H.C.F. of 72, 144 and 216.  
(a) 36 (b) 72 (c) 18 (d) 12
6. Find the H.C.F. of 2502 and 3654.  
(a) 6 (b) 9 (c) 18 (d) 24
7. Find the greatest number that divides 36, 60 and 84 exactly.  
(a) 12 (b) 6 (c) 18 (d) 4
8. The greatest possible length (in cm) which can be used to measure the lengths 495 cm, 900 cm and 1665 cm exactly, is  
(a) 15 (b) 25 (c) 35 (d) 45
9. The length of the longest tape (in cm) which can be used to measure the lengths 7 m, 3 m 85 cm and 12 m 95 cm exactly is  
(a) 37 (b) 35 (c) 20 (d) 11
10. The dimensions of a room are 10 m, 12 m and 18 m. Find the length of the greatest possible scale which can measure all these dimensions exactly.  
(a) 1 m (b) 2 m (c) 5 m (d) 180 m
11. The H.C.F. of 432 and 1440 is  
(a) 36 (b) 72 (c) 144 (d) 18
12. What is the maximum length of equal pieces that can be cut from two rods of lengths 162 cm and 234 cm?  
(a) 18 cm (b) 9 cm (c) 36 cm (d) 6 cm
13. The highest common factor of 24, 48 and 84 is:  
(a) 4 (b) 6 (c) 8 (d) 12
14. What is the H.C.F. of any two consecutive natural numbers?  
(a) 0 (b) 1  
(c) 2 (d) any natural number
15. What is the H.C.F. of two or more consecutive even numbers?  
(a) 0 (b) 1  
(c) 2 (d) any even natural number
16. What is the H.C.F. of two or more consecutive odd numbers?  
(a) 0 (b) 1  
(c) 2 (d) any odd natural number
17. The H.C.F. of an even number and an odd number is always equal to:  
(a) 0 (b) 1  
(c) 2 (d) any odd natural number
18. (a) 400 (b) 500 (c) 600 (d) 1800
19. The H.C.F. of the following numbers is:  
 $2 \times 3^2 \times 5$ ,  $2^3 \times 3^2 \times 7$  and  $2^2 \times 3^4 \times 5^2 \times 7$   
(a) 18 (b) 6 (c) 9 (d) 36
20. The G.C.D. of 54, 81, 270 and 135 is  
(a) 3 (b) 6 (c) 9 (d) 27
21. The L.C.M. of 12, 18 and 24 is  
(a) 64 (b) 72 (c) 84 (d) 144
22. Find the L.C.M. of 48, 64 and 120.  
(a) 840 (b) 920 (c) 960 (d) 1920
23. Find the L.C.M. of 24, 36 and 40.  
(a) 360 (b) 720 (c) 540 (d) 620
24. The lowest common multiple of 75, 150 and 275 is  
(a) 1650 (b) 1840 (c) 1760 (d) 1590
25. The smallest number which is exactly divisible by 10, 15 and 45 is  
(a) 60 (b) 90 (c) 150 (d) 180
26. The L.C.M. of  $2^3 \times 3^4 \times 5^2$ ,  $2^4 \times 3^2 \times 5$  and  $2^2 \times 3^3$  is  
(a)  $2^2 \times 3^2$  (b)  $2^2 \times 3^2 \times 5$   
(c)  $2^4 \times 3^4$  (d)  $2^4 \times 3^4 \times 5^2$
27. The L.C.M. of  $2^2 \times 5^3 \times 7$ ,  $2^3 \times 3^2 \times 7^2 \times 11$  and  $2^3 \times 3 \times 5^2 \times 11$  is  
(a)  $2^3 \times 3^2 \times 5^2 \times 7^2 \times 11$  (b)  $2^2 \times 3^2 \times 5 \times 7^2 \times 11$   
(c)  $2^3 \times 3^2 \times 5^3 \times 7^2 \times 11$  (d) None of these
28. Which of the following numbers is divisible by 4, 8, 12 and 16?  
(a) 32 (b) 36 (c) 48 (d) 64
29. The H.C.F. of any two co-primes is  
(a) 0 (b) 1  
(c) 2 (d) any natural number
30. The L.C.M. of any two co-primes is always equal to their  
(a) sum (b) difference  
(c) product (d) quotient
31. The product of two co-prime numbers is 195. Their L.C.M. should be  
(a) 1 (b) 195  
(c) 15 (d) cannot be determined
32. Six bells commence tolling together and toll at the intervals of 2, 4, 6, 8, 10 and 12 seconds respectively. In 30 minutes, how many times do they toll together?  
(a) 30 (b) 8 (c) 15 (d) 16
33. The bells of three schools begin to toll together and after that they toll at the intervals of 25, 40 and 60 minutes. After what interval of time will they again toll together?  
(a) 10 hours (b) 6 hours  
(c) 4 hours (d) 8 hours
34. Find the least number which is exactly divisible by 18, 24 and 27.  
(a) 216 (b) 256 (c) 432 (d) 512



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## LCM - HCF

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35. There are three scales of 40 cm, 50 cm and 60 cm respectively. What is the least length that can exactly be measured by these three scales?  
(a) 9 m (b) 6 m (c) 12 m (d) 7.2 m
36. Three bells ring simultaneously at 11:00 a.m. They ring at regular intervals of 20, 30 and 40 minutes respectively. The time when all the three bells will ring together next is  
(a) 1:00 p.m. (b) 1:30 p.m.  
(c) 1:45 p.m. (d) 2:00 p.m.
37. The L.C.M. of three different numbers is 264. Which of the following cannot be their H.C.F.?  
(a) 6 (b) 8 (c) 12 (d) 15
38. The L.C.M. of three different numbers is 486. Which of the following can be their H.C.F.?  
(a) 18 (b) 15 (c) 16 (d) 24
39. The least possible number which is exactly divisible by 21, 49 and 63 is  
(a) 379 (b) 441 (c) 476 (d) 529
40. Three bells ring at the intervals of 15, 18 and 30 minutes respectively. They started ringing simultaneously at 9:00 a.m. What will be the next time, when they all ring together?  
(a) 10:00 a.m. (b) 10:15 a.m.  
(c) 10:30 a.m. (d) 10:45 a.m.
41. The greatest number that divides 729 and 901 leaving remainders 9 and 5 respectively is  
(a) 9 (b) 12 (c) 16 (d) 27
42. Find the greatest number which divides 41, 71 and 91, leaving remainder 1 in each case.  
(a) 5 (b) 10 (c) 15 (d) 20
43. Find the largest number which divides 167 and 95 leaving 5 as remainder in each case.  
(a) 18 (b) 9 (c) 12 (d) 24
44. Find the largest number that divides 98 and 76 leaving 2 and 4 as remainders respectively.  
(a) 12 (b) 16 (c) 18 (d) 24
45. Find the greatest number that will divide 43, 91 and 183 so as to leave the same remainder in each case.  
(a) 4 (b) 8 (c) 12 (d) 16
46. The greatest number that divides 140, 176 and 264 leaving remainders 4, 6 and 9 respectively, is  
(a) 4 (b) 11 (c) 13 (d) 17
47. The greatest number that divides 19, 35 and 59 so as to leave the same remainder in each case is  
(a) 6 (b) 7 (c) 8 (d) 9
48. If H.C.F. and L.C.M. of two numbers 'a' and 'b' are x and y respectively, then which of the following expressions is correct?  
(a)  $a + b = x + y$  (b)  $a \times b = x \times y$   
(c)  $a \times x = b \times y$  (d)  $\frac{a}{b} = \frac{x}{y}$
49. The L.C.M. of the two numbers is 48. If the numbers are 16 and 24, then their H.C.F. is  
(a) 4 (b) 6 (c) 8 (d) 12
50. The H.C.F. of two numbers is 5 and their L.C.M. is 225. If one of the numbers is 45, then the other number is  
(a) 15 (b) 20 (c) 35 (d) 25
51. The H.C.F. of two numbers is 11 and their L.C.M. is 7700. If one of the numbers is 275, then the other number is  
(a) 288 (b) 308 (c) 342 (d) 384
52. The product of two numbers is 2028 and their H.C.F. is 13. The L.C.M. of the numbers is  
(a) 2028 (b) 136 (c) 156 (d) 184
53. H.C.F. of two numbers is 2 and product of these two numbers is 2340. Find the L.C.M. of the two numbers.  
(a) 840 (b) 980 (c) 1020 (d) 1170
54. H.C.F. and L.C.M. of two numbers are 10 and 60 respectively. One of the numbers is 20, find the other number.  
(a) 15 (b) 25 (c) 30 (d) 40
55. The H.C.F. of  $\frac{a}{b}$ ,  $\frac{c}{d}$  and  $\frac{e}{f}$  is equal to:  
(a)  $\frac{\text{H.C.F. of } a, c, e}{\text{L.C.M. of } b, d, f}$  (b)  $\frac{\text{H.C.F. of } b, d, f}{\text{L.C.M. of } a, c, e}$   
(c)  $\frac{\text{H.C.F. of } a, c, e}{\text{H.C.F. of } b, d, f}$  (d)  $\frac{\text{L.C.M. of } a, c, e}{\text{H.C.F. of } b, d, f}$
56. The L.C.M. of  $\frac{p}{q}$ ,  $\frac{r}{s}$  and  $\frac{t}{u}$  is equal to:  
(a)  $\frac{\text{L.C.M. of } p, r, t}{\text{L.C.M. of } q, s, u}$  (b)  $\frac{\text{L.C.M. of } p, r, t}{\text{H.C.F. of } q, s, u}$   
(c)  $\frac{\text{H.C.F. of } p, r, t}{\text{L.C.M. of } q, s, u}$  (d)  $\frac{\text{H.C.F. of } p, r, t}{\text{L.C.M. of } q, s, u}$
57. The H.C.F. of  $\frac{9}{10}$ ,  $\frac{12}{15}$  and  $\frac{21}{40}$  is  
(a)  $\frac{3}{5}$  (b)  $\frac{3}{120}$  (c)  $\frac{252}{5}$  (d)  $\frac{250}{120}$
58. The H.C.F. of  $\frac{3}{4}$ ,  $\frac{5}{6}$  and  $\frac{9}{10}$  is  
(a)  $\frac{1}{60}$  (b)  $\frac{1}{2}$  (c)  $\frac{45}{2}$  (d)  $\frac{45}{60}$
59. The L.C.M. of  $\frac{2}{3}$ ,  $\frac{4}{9}$  and  $\frac{5}{6}$  is  
(a)  $\frac{8}{27}$  (b)  $\frac{20}{3}$  (c)  $\frac{10}{3}$  (d)  $\frac{20}{27}$
60. The L.C.M. of  $\frac{2}{3}$ ,  $\frac{3}{4}$ ,  $\frac{4}{5}$ ,  $\frac{5}{6}$  and  $\frac{6}{7}$  is  
(a) 30 (b)  $\frac{1}{60}$  (c) 60 (d)  $\frac{1}{30}$



61. The L.C.M. of two numbers is 720 and their H.C.F. is 12. If one of the numbers is 204, then the other number is  
(a) 814 (b) 796 (c) 756 (d) 714
62. The H.C.F. of two numbers is 8. Which one of the following can never be their L.C.M.?  
(a) 24 (b) 48 (c) 56 (d) 60
63. Find the least number which when divided by 8, 12 and 15 leaves remainder 1 in each case.  
(a) 119 (b) 181 (c) 120 (d) 121
64. The least number which when divided by 15, 20 and 36 leaves 3 as remainder in each case is  
(a) 177 (b) 183 (c) 243 (d) 153
65. A number when divided by 5, 9 and 13, leaves remainders 2, 6 and 10 respectively. Such a least possible number is  
(a) 492 (b) 542 (c) 582 (d) 612
66. The least number which when divided by 6, 9, 12, 15 and 18 leaves the same remainder 2 in each case is  
(a) 180 (b) 178 (c) 176 (d) 182
67. The smallest number which when divided by 3, 4, 5 and 6 leaves remainders 2, 3, 4 and 5 respectively, is  
(a) 61 (b) 60 (c) 59 (d) 119
68. The greatest number of four digits which is divisible by 15, 25, 40 and 75, is  
(a) 9999 (b) 9800 (c) 9700 (d) 9600
69. The smallest 4-digit number which is exactly divisible by 7, 9 and 12 is  
(a) 1004 (b) 1008 (c) 1012 (d) 1006
70. The smallest 5-digit number which is exactly divisible by 18, 24 and 32 is  
(a) 10040 (b) 10060 (c) 10080 (d) 10000
71. The greatest number of four digits which is divisible by 25, 40 and 60, is  
(a) 9600 (b) 9660 (c) 9690 (d) 9740
72. The largest 3-digit number which when divided by 10, 12 and 15 leaves 5 as remainder in each case, is  
(a) 985 (b) 975 (c) 945 (d) 965
73. The smallest 4-digit number which when divided by 20, 36 and 48 leaves 8 as remainder in each case, is  
(a) 1432 (b) 1448 (c) 1408 (d) 1484
74. If large square beds of equal size are to be made for planting vegetables on a plot of land 18 metres long and 15 metres wide, then what is the maximum possible length of each bed?  
(a) 1 m (b) 3 m (c) 90 m (d) none of these
75. In a morning walk, three persons step off together. Their steps measure 80 cm, 85 cm and 90 cm respectively. What is the minimum distance each should walk so that all can cover the same distance in complete steps?  
(a) 118.60 m (b) 120.20 m  
(c) 122.40 m (d) 124.60 m
76. The greatest number of 3-digit numbers which are exactly divisible by 11 is  
(a) 0.18 (b) 0.12 (c) 0.24 (d) 0.36
77. The least multiple of 7, which when divided by 6, 9, 15 and 18 leaves a remainder 4, is  
(a) 324 (b) 336 (c) 348 (d) 364
78. The least number which should be added to 2497 so that the sum is exactly divisible by 3, 4, 5 and 6 is  
(a) 37 (b) 23 (c) 17 (d) 19
79. The least number which must be subtracted from 1847 such that the new number obtained will be divisible by 30, 45 and 60, is  
(a) 47 (b) 133 (c) 33 (d) 87
80. L.C.M. of two numbers is 28 times of their H.C.F. The sum of L.C.M. and H.C.F. is 1740. If one of the numbers is 240, then the other number is  
(a) 320 (b) 360 (c) 380 (d) 420
81. Find the least number which when divided by 8, 10 and 12 leaves a remainder 5 but when divided by 13 leaves no remainder.  
(a) 725 (b) 845 (c) 785 (d) 865
82. Two numbers are in the ratio 3 : 5 and their L.C.M. is 75. What is their H.C.F.?  
(a) 3 (b) 5 (c) 10 (d) 15
83. The ratio of two numbers is 3 : 4 and their L.C.M. is 180. The greater number is  
(a) 30 (b) 45 (c) 60 (d) 75
84. The ratio of two numbers is 4 : 5. Their H.C.F. is 5. Their L.C.M. is  
(a) 75 (b) 80 (c) 60 (d) 100
85. The L.C.M. of two numbers is 48. If the numbers are in the ratio 2 : 3, then the sum of the numbers is  
(a) 32 (b) 36 (c) 40 (d) 44
86. Three numbers are in the ratio of 3 : 4 : 5 and their L.C.M. is 2400. Their H.C.F. is  
(a) 40 (b) 20 (c) 120 (d) 80
87. The least number which is exactly divisible by the first four even numbers is  
(a) 12 (b) 24 (c) 36 (d) 48
88. The H.C.F. of two numbers is 23 and the other two factors of their L.C.M. are 13 and 14. The larger of the two numbers is  
(a) 322 (b) 299 (c) 346 (d) 278
89. Two numbers are in the ratio of 5 : 8. If their H.C.F. is 7, then their L.C.M. is  
(a) 140 (b) 180 (c) 240 (d) 280
90. Three tanks contain 72 litres, 90 litres and 144 litres of water. What is the largest measure that can measure all the different quantities exactly?  
(a) 9 l (b) 12 l (c) 24 l (d) 18 l

91. Three cyclists run around a 60 km long circular path at the speeds of 10 km/hr, 12 km/hr and 15 km/hr respectively. After what time will they meet at the point from where they started their journey?  
(a) 15 hours (b) 30 hours  
(c) 60 hours (d) 90 hours
92. Find the H.C.F. of 902, 1394 and 3321.  
(a) 23 (b) 27 (c) 37 (d) 41
93. What is the L.C.M. of two numbers if their H.C.F. is 2 and the product is 112?  
(a) 56 (b) 112 (c) 224 (d) none of these
94. The L.C.M. of two numbers is 630 and their H.C.F. is 9. If one of the numbers is 90, then find out the other number.  
(a) 60 (b) 63 (c) 68 (d) 74
95. Find out the L.C.M. of 75, 90 and 125.  
(a) 1850 (b) 2060 (c) 2150 (d) 2250
96. Four traffic signals glow at the intervals of 5, 10, 15 and 20 minutes. After what time will they glow together?  
(a) 30 minutes (b) 90 minutes  
(c) 60 minutes (d) 120 minutes
97. Find the smallest number which when divided by 12 and 20 leaves no remainder.  
(a) 60 (b) 40 (c) 120 (d) 90
98. The H.C.F. of two numbers is 12 and their difference is 12. Which of the following can be the numbers?  
(a) 84, 96 (b) 66, 78 (c) 70, 82 (d) 62, 78
99. Find the least number which when divided by 30, 36, 56 and 63 leaves 8 as a remainder in each case.  
(a) 2512 (b) 2520 (c) 2528 (d) 2536
100. Find the smallest number which when divided by 3, 5, 12 and 15 has in each case 2 as a remainder  
(a) 58 (b) 62 (c) 60 (d) 122
101. Find the smallest number that is divisible by each one of 9, 12 and 15.  
(a) 60 (b) 90 (c) 120 (d) 180
102. Find the greatest number that will divide 37, 56, 93 leaving remainder 1, 2 and 3 respectively.  
(a) 9 (b) 18 (c) 15 (d) 12
103. The H.C.F. and L.C.M. of two numbers are 6 and 864 respectively. If one number is 96, find the other number.  
(a) 84 (b) 45 (c) 54 (d) 24
104. Ram, Shyam and Mohan start to run together on a circular track. They complete a round of it in 75, 50 and 30 minutes respectively. After how much time will they meet together for the first time at the starting point?  
(a) 5 hours (b) 2 hours  
(c) 3 hours (d)  $\frac{5}{2}$  hours
105. Three numbers are in the ratio of 3 : 4 : 5 and their L.C.M. is 2400. Their H.C.F. is:  
(a) 120 (b) 60 (c) 80 (d) 40
106. The least common multiple of 3, 4 and 9 is:  
(a) 36 (b) 12 (c) 27 (d) 45
107. What will be the H.C.F. of 216, 288 and 720?  
(a) 12 (b) 24 (c) 84 (d) 72
108. A milkman has two cans of milk containing 75 litres and 45 litres of milk respectively. What will be the measure of the largest vessel that can measure the milk of the two cans exactly?  
(a) 12 litres (b) 18 litres  
(c) 15 litres (d) 10 litres
109. What is the least multiple of 23 which when divided by 18, 21 and 24 leaves remainders 7, 10 and 13 respectively?  
(a) 1240 (b) 3013 (c) 2364 (d) 7628
110. Four clocks ring at the time interval of 6s, 8s, 12s and 18s respectively. If they ring together at 12 a.m., then how many times will they ring together within the time span of 6 minutes?  
(a) 6 times (b) 4 times (c) 7 times (d) 5 times
111. The L.C.M. of two numbers is 28 times of their H.C.F. The sum of their L.C.M. and H.C.F. is 1740. If one number is 240, then what is the other number?  
(a) 420 (b) 460 (c) 500 (d) 380
112. Find out the smallest number which is divisible by 6, 10, 12 and 18.  
(a) 360 (b) 180 (c) 120 (d) 60
113. The L.C.M. of two prime numbers is equal to their  
(a) Difference (b) Product  
(c) Sum (d) None of the above
114. From a basket of mangoes when counted in two's there was one extra, counted in three's there were two extra, counted in four's there were three extra, counted in five's there were four extra, counted in six's there were five extra. But counted in seven's there were no extra. At least how many mangoes were there in the basket?  
(a) 119 (b) 110 (c) 111 (d) 126
115. What is the greatest number which when divides 3026 and 5053 leaves remainders 11 and 13 respectively?  
(a) 15 (b) 30 (c) 45 (d) 60