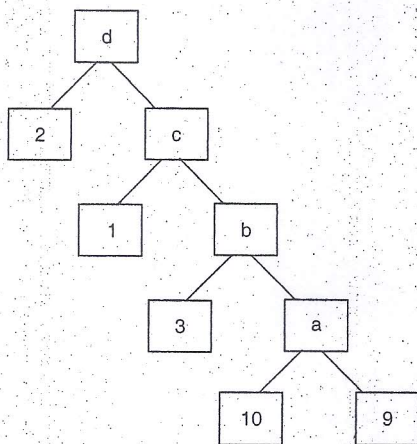




1. Write the HCF of two co-prime numbers
2. We can not find LCM of two positive integers by using Euclid's division algorithm. (True / False)
3. Product of two integers is equal to the \_\_\_\_\_ of their HCF and \_\_\_\_\_.
4. If  $a$  and  $b$  are two co-prime numbers. What is their LCM ?
5.  $\pi$  is a/an \_\_\_\_\_ number.
6. From given factor tree find value of  $a + b + c - d$ .



7. Explain why  $2 \times 3 \times 7 + 7$  is a composite number ?
8. Show that  $(3 + 2\sqrt{2})(3 - 2\sqrt{2})$  is not an irrational number.
9. Prove that  $(5 - \sqrt{3})$  is an irrational number. If it is given that  $(\sqrt{3})$  is an irrational number.
10. Find the largest number that divides 398, 436 and 542 leaving remainders 7, 11 and 15 respectively.
11. Find H.C.F. of 510 and 92 by using Euclid's division algorithm.
12. Without performing long division check which of following are terminating and which are non-terminating  
 (i)  $48/375$                       (ii)  $6/27$                       (iii)  $11/550$
13. Explain why  $(42)^n$  cannot end with zero. Also find the unit's place digit in the expansion of  $(42)^n$  if  $n = 17$ .
14. Can two numbers have 18 as their HCF and 380 as their LCM. Give reason.

OR

Show that cube of a positive integer of the form  $6q + r$ ,  $q$  is an integer and  $0 \leq r < 5$  is also of the form  $6m + r$ .

15. The circumferences of the front and rear wheels of a carriage are  $6\frac{3}{14}$  and  $8\frac{1}{18}$  m respectively. At any

given moment, a chalk mark is put on the point of contact of each wheel with the ground. Find the distance travelled by the carriage so that both the chalk marks are again on the ground at the same time.

OR

Two persons A and B walk round a circle whose diameter is 1.4 km. A walks at a speed of 165 metres per minute while B walks at a speed of 110 metres per minute. If they both start at the same time, from the same point and walk in the same direction, at what interval of time would they both be at the same starting point again?