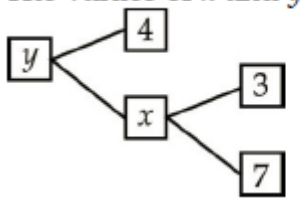
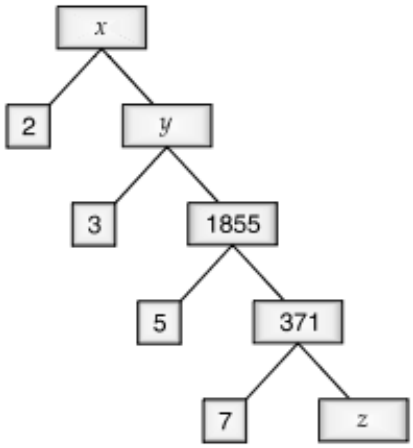
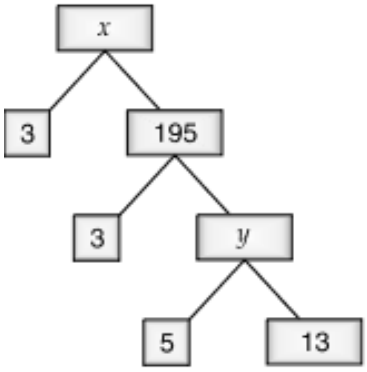
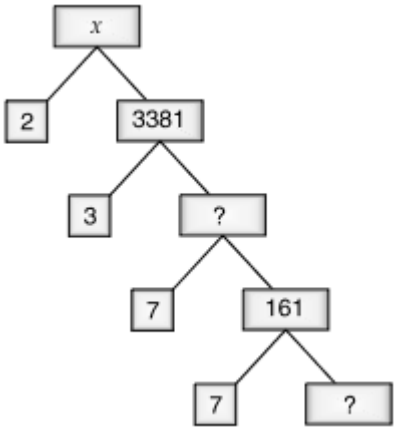
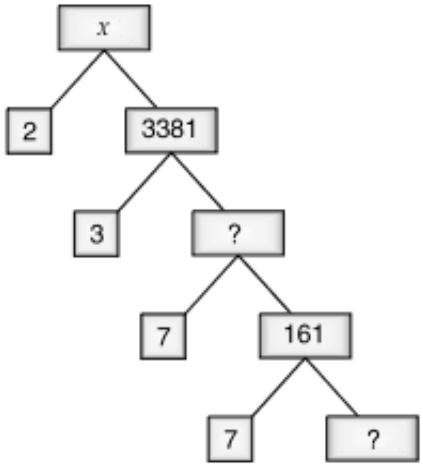
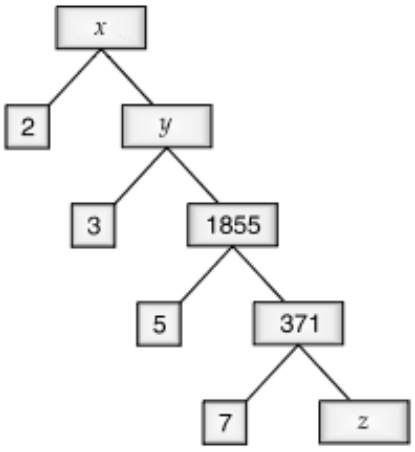
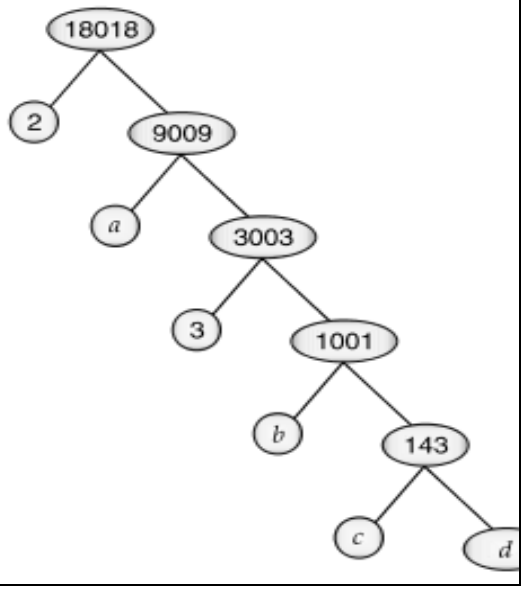
INDIAN SCHOOL AL WADI AL KABIR

DEPARTMENT OF MATHEMATICS 2024 – 2025

Work Sheet –- Class X

Real Numbers

.1.	If a and b are positive integers, then HCF (a, b) x LCM (a, b) = (a) a x b (b) a + b (c) a – b (d) a/b
2.	If the HCF of two numbers is 1, then the two numbers are called (a) composite (b) relatively prime or co-prime (c) perfect (d) irrational numbers
3.	The decimal expansion of $\frac{93}{1500}$ will be (a) terminating (b) non-terminating (c) non-terminating repeating (d) non-terminating non-repeating.
4.	The HCF of 52 and 130 is (a) 52 (b) 130 (c) 26 (d) 13
5.	The HCF of smallest composite number and the smallest prime number is (a) 0 (b) 1 (c) 2 (d) 3
6.	Given that HCF(1152, 1664) = 128 the LCM(1152, 1664) is (a) 14976 (b) 1664 (c) 1152 (d) none of these
7.	Which one of the following rational number is a non-terminating decimal expansion: (a) $\frac{33}{50}$ (b) $\frac{66}{180}$ (c) $\frac{6}{15}$ (d) $\frac{41}{1000}$
8.	L.C.M. of two co-prime numbers is always (a) product of numbers (b) sum of numbers (c) difference of numbers (d)none
9.	The decimal expansion of the rational number $\frac{14587}{1250}$ will terminate after: (a) one decimal place (b) two decimal places (c) three decimal places (d) four decimal places
10	If the HCF of two numbers is 1, then the two numbers are called (a) composite (b) relatively prime or co-prime (c) perfect (d) irrational numbers
11	If a and b are positive integers, then HCF (a, b) x LCM (a, b) = (a) a x b (b) a + b (c) a – b (d) a/b

12	If two positive integers a and b are written as $a = x^3y^2$ and $b = xy^3$; x, y are prime numbers, then HCF (a, b) is (a) xy (b) xy^2 (c) x^3y^3 (d) x^2y^2
13	The decimal expansion of $\frac{189}{125}$ will terminate after : (A) 1 place of decimal (B) 2 places of decimal (C) 3 places of decimal (D) 4 places of decimal
14	The decimal expansion of the rational number $\frac{33}{2^2.5}$ will terminate after (a) one decimal place (b) two decimal places (c) three decimal places (d) more than 3 decimal places
15	Given that HCF(1152, 1664) = 128 the LCM(1152, 1664) is (a) 14976 (b) 1664 (c) 1152 (d) none of these
16	Which one of the following rational number is a non-terminating decimal expansion: (a) $\frac{33}{50}$ (b) $\frac{66}{180}$ (c) $\frac{6}{15}$ (d) $\frac{41}{1000}$
17	L.C.M. of two co-prime numbers is always (a) product of numbers (b) sum of numbers (c) difference of numbers (d)none
18	A rational number which has non terminating decimal representation is : (A) $\frac{111}{125}$ (B) $\frac{127}{8}$ (C) $\frac{19}{5^3 \times 2^2}$ (D) $\frac{9}{455}$
19	The values of x and y in the given figure are  (A) $x=10$; $y=14$ (B) $x=21$; $y=84$ (C) $x=21$; $y=25$ (D) $x=10$; $y=40$
20	The decimal expansion of number $\frac{441}{2^2 \times 5^3 \times 7}$ has : (A) a terminating decimal (B) non-terminating but repeating (C) non-terminating non repeating (D) terminating after two places of decimal
21	The reciprocal of an irrational number is : (A) an integer (B) rational (C) a natural number (D) irrational

22	Can two numbers have 18 as their HCF and 380 as their LCM? Give reasons.
23	Express each of the following positive integers as the product of its prime factors: (i) 3825 (ii) 5005 (iii) 7429
24	Find the HCF of 65 and 117 and express it in the form 65m + 117n.
25	If the HCF of 210 and 55 is expressible in the form of 210x5 + 55y, find y.
26	If the HCF of 408 and 1032 is expressible in the form of 1032m – 408x5, find m.
27	If the HCF of 657 and 963 is expressible in the form of 657n + 963x(-15), find n.
28	Find the largest number which divides 245 and 1029 leaving remainder 5 in each case.
29	If LCM (480, 672) = 3360, find HCF (480,672).
30	Complete The Following Factor Tree