

परमाणु ऊर्जा शिक्षा संस्था, मुंबई
Atomic Energy Education Society, Mumbai
Session : 2023 – 24

Class: X

Subject: MATHEMATICS

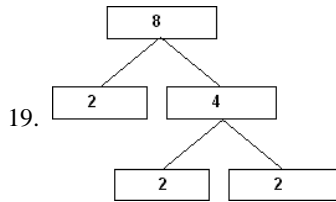
WORKSHEET NO.- 1 ANSWER KEY

Name of the Chapter : REAL NUMBERS (CHAPTER – 1)

1. (a)
2. (d)
- 3.(b)
- 4.(d)
- 5.(b)
6. (a)
- 7.(b)
- 8.(c)
9. (a)
- 10.(b)
11. we have $7 - 2\sqrt{2}$ since
 $\sqrt{2}$ is an irrational number and we know that product of rational \times irrational = irrational
also difference of rational and irrational
is irrational. therefore $7 - 2\sqrt{2}$ is irrational
- 12.HCF = 2825
13. 17,23,29 are prime numbers.they have only two factors
i.e 1 and itself $17 = 1 \times 17$
 $23 = 1 \times 23$
 $29 = 1 \times 29$
Therefore,
HCF (17, 23, 29) = 1 (hcf of prime numbers =1)
LCM (17, 23, 29) = $17 \times 23 \times 29 = 11339$. (LCM of prime numbers = product of the numbers)
14. Least prime factor of "a" is 3 and least prime factor
of "b" is 7 Therefore, sum of least prime factors of a
and b = $3 + 7 = 10$ and least factor of 10 is 2
Therefore, least factor of a + b is also 2
15. 42
16. HCF (a,b) = b
17. 1

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18. 4



So, $8 = 2 \times 2 \times 2 = 2^3$

So, prime factor of 8 is 2.

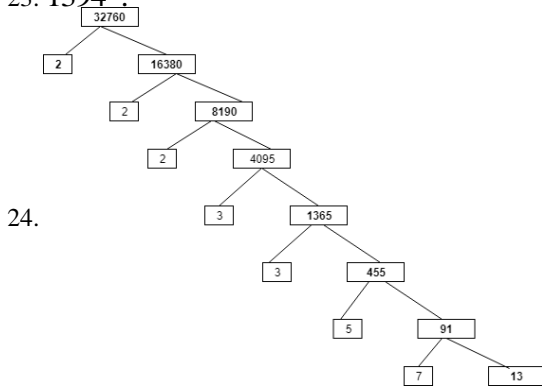
20. $140 = 2 \times 2 \times 5 \times 7 = 2^2 \times 5 \times 7$

21. 1253

22. L.C.M of 40, 36 and 126 = 2520

H.C.F of 40, 36 and 126 = 2

23. 1394



24.

25. $p = 2$ and $q = 5$

26. $X = -9$ $y = 19$

27. Not possible

28. Correct proof

29. Correct proof

30. 35 x 12 it is a composite number

31. Required number of books = 420

32. $a = -2$, $b = -3$

33. 4 groups

34. 18 cartons

35. Correct proof

36. 294840

37. Correct proof

38. Correct proof

39. Correct proof

40. Correct proof

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