



INDIAN SCHOOL AL WADI AL KABIR

Dept. of Mathematics 2020 -2021, Class - X

Work sheet – Real Numbers (2)

1. A sweet seller has 420 kaju burfis and 130 badam burfis she wants to stack them in such a way that each stack has the same number, and they take up the least area of the tray. What is the number of burfis that can be placed in each stack for this purpose?
[Hint: HCF = 10]
2. 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?
[Hint: LCM = 12240cm]
3. The traffic lights at three different road crossings change after every 48 seconds, 72 seconds and 108 seconds respectively. If they change simultaneously at 7 a.m., at what time will they change simultaneously again?
[Hint: LCM = 432 sec]
4. Three tankers contain 403 litres, 434 litres and 465 litres of diesel respectively. Find the maximum capacity of a container that can measure the diesel of the three containers exact number of times.
[Hint: HCF = 31 lit]
5. In a seminar, the number, the number of participants in Hindi, English and Mathematics are 60, 84 and 108, respectively. Find the minimum number of rooms required if in each room the same number of participants are to be seated and all of them being in the same subject.
[Hint: HCF = 12]
6. 144 cartons of Coke cans and 90 cartons of Pepsi cans are to be stacked in a canteen. If each stack is of the same height and is to contain cartons of the same drink, what would be the greatest number of cartons each stack would have?
[Hint: HCF = 18]
7. Given that $HCF(306, 657) = 9$, find the $LCM(306, 657)$.
[Ans: 22338]
8. Prove that $\frac{2\sqrt{3}}{5}$ is an irrational number.
9. Prove that $\sqrt{3} + \sqrt{5}$ is an irrational number.
10. Prove that $5 - 2\sqrt{3}$ is an irrational number.