

- 10- Three sets of eng, hindi, maths books have to be stacked in such a way that all books are store topic-wise and height of each stock is the same the number of English ,books is 96, n (H) =240 and n(m) =336 assuming books are of same thickness determine number of stocks of eng, hindi, maths.
- 11- Determine the nature of decimal expansion of rational no.
- a) 27.7624 b) —
- 12- Prove that one of every three consecutive positive integers is divisible by 3.
- 13- Prove that
- a) $\sqrt{2}$ is an irrational number
- b) $\sqrt{5}$ is an irrational number
- c) $\sqrt{3}$ is an irrational number
- 14- There is a circular path around a sport field Sonia takes 18 minutes to drive one round of the field, while Ravi takes 12 minutes for the same. Suppose they both start at the same point and at the same time, and go in the same direction. After how many minutes will they meet again at the starting point
- 15- A sweet seller has 420 kaju barfis and 130 badam barfis she wants to stack them in such a way that each stack has the same number and they take up the least area of they what is the number of that can be placed in each stock for this purpose?
- 16- An army contingent of 616 members is to march behind an army band of 32 members in a parade the two groups are to march in the same number of columns what is the maximum number of columns in which they can march.
- 17- Explain way $7 \times 11 \times 13 + 13$ and $7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 + 5$ are composite numbers.
- 18- Fund the HCF of 96 and 404 by prime factorization method hence find the LCM.
- 19- Show that is positive odd integer is in the form of $4m+1$ and $4m+3$ where m is a positive integer.
- 20- Show that positive even integer is in the form of $6q+2$ and $6q+4$ where q is a positive integer.