

Class: 9th
Subject: Maths
Topic: Real Numbers
No. of Questions: 20

- Q1. Use Euclid's division lemma to find the HCF of 4052 and 12576
- Q2. A sweet seller has 420 kaju barfis and 130 badaam 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 the tray. What is the number of that can be placed in each stack for this purpose?
- Q.3 Find the HCF of 96 and 404 by prime factorization method. Hence find their LCM.
- Q.4 Find the HCF and LCM of 6, 72, 120, using prime factorization method.
- Q.5 Show that $3\sqrt{2}$ is irrational.
- Q.6 There is a circular path around a sports 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 same direction. After how many minutes will they meet again after the starting point?
- Q.7 Given $\text{HCF}(306, 657)=9$, find the $\text{LCM}(306, 657)$
- Q.8 The LCM and HCF of two numbers is 180 and 6 respectively. If one of the numbers is 30, find the other.
- Q.9 The floor of a room is 6m 75cm long and 5m wide. It is to be paved with square tiles. Find the largest size of tile needed?
- Q.10 Find the greatest number which will divide 625 and 1433 leaving remainder 5 and 3 respectively.
- Q.11 Find the HCF of 38, 64 and 82 by prime factorization method
- Q.12 Find the LCM of 40, 48 and 45 by prime factorization method.
- Q.13 Four bells toll at intervals of 8,9,12 and 15 minutes respectively. If they toll together at 3 pm,

when will they toll together next?

Q.14 In a morning walk, three boys step off together. Their steps measure 80 cm, 85 cm and 90 cm respectively. What minimum distance should each walk so that all can cover the distance in complete steps?

Q.15 Express 7429 as the product of primes

Q.16 Prove that $5 - \sqrt{3}$ is irrational.

Q.17 Find the HCF of 1624, 522 and 1276 using Euclid's division lemma

Q.18 without actually performing long division, state the type of rational number for $\frac{14588}{625}$

Q.19 Write the decimal expansion for $\frac{13}{125}$, without actual division

Q.20 Express 0.0875 as a rational number.