

CLASS – X

Maths

Date:-15/04/2020

➔ Watch the online videos “Real number -Lecture 1” from Optimum Online E-Learning Platform and try to comprehend the concepts of Rational numbers. After that try to solve the questions given in your assignment.

1: What do you mean by Euclid's division lemma?

2: A number when divided by 61 gives 27 as quotient and 32 as remainder. Find the number. Using Euclid's lemma.

3: Using Euclid's algorithm, find the HCF of:
(i) 405 and 2520 (ii) 504 and 1188 (iii) 960 and 1575

4: Show that any positive odd integer is of the form $(6m + 1)$ or $(6m + 3)$ or $(6m + 5)$, where m is some integer.

5: Prove that if x and y are both odd positive integers then $x^2 + y^2$ is even but not divisible by 4.
Note: (x^2 means exponential power of x is 2)

6: Use Euclid's algorithm to find HCF of 1190 and 1145.
Express the HCF in the form $1190m + 1145n$.

7: Using prime factorization, find the HCF and LCM of:
(i) 36, 84 (ii) 23, 31 (iii) 96, 404 (iv) 144, 198 (v) 396, 1080
(vi) 1152, 1664

In each case, verify that: $\text{HCF} \times \text{LCM} = \text{Product of given numbers}$

8: Using prime factorization, find the HCF and LCM of:
(i) 8, 9, 25 (ii) 12, 15, 21 (iii) 17, 23, 29 (iv) 24, 36, 40 (v) 30, 72, 432
(vi) 21, 28, 36, 45

9: The HCF of two numbers is 145 and their LCM is 2175. If one of the numbers is 725, find the other.

10: Find the simplest form of: using prime factorization.

(i) 69/92

(ii) 473/645

(iii) 1095/1168

(iv) 368/496

**Link of Optimum Online E-Learning Platform:- www.optimumschool.net/online

In case of any query call at +91-9818033213



OPTIMUM
INTERNATIONAL SCHOOL