INDIAN SCHOOL NIZWA

MATHEMATICS WORKSHEET-1

CH-1 REAL NUMBERS

DATE: APRIL CLASS :X

1. Find the greatest possible length which can be used to measure exactly each of lengths 7m , 3m 85cm,, and 12m 95cm.
2. Find the least number which when divided by 18,24, 30 and 42 leaves remainder 1.
3. HCF of 65 and 117 is expressible in the form 65m-117, then what is the value of m?
4. Find the LCM and HCF of 12, 15 and 21 using Prime Factorization method.
5. Find prime factors of the following numbers: 1. 236 2. 1072 3. 448 4. 1000
6. Prove that $\sqrt{7}$ is irrational.
7. $\frac{\sqrt{5}-\sqrt{3}}{\sqrt{5}+\sqrt{3}}$ = 2x-$\sqrt{15}$ then find the value of x?
8. If n is any positive integer then what will be the type of n^2 ?
9. Determine rational numbers p and q if
$$\frac{7+\sqrt{5}}{7-\sqrt{5}}-\frac{7-\sqrt{5}}{7+\sqrt{5}}=p-7\sqrt{5}\,q.$$
10. A number is expressed as a product of its prime factors as: $2^3 \times 3 \times 5^2$ what is the number?
11. How to find HCF by prime factorisation method?
    1. 882, 300
    2. 150, 220
    3. 2500, 155
    4. 196, 1096