

Que 1. If p is a prime number then prove that \sqrt{p} is irrational.

Que 2. Prove that $\sqrt{11}$ is irrational.

Que 3. If the product of two numbers is 1050 and their HCF is 25, find their LCM.

Que 4. Simplify;

$$\frac{2\sqrt{45} + 3\sqrt{20}}{2\sqrt{5}}$$

Que 5. Express $0.\overline{254}$ as a fraction in simplest form.

Que 6. Six bells commence tolling together and toll at intervals of 2, 4, 6, 8, 10, 12 minutes respectively. In 30 hours, how many times do they toll together?

Que 7. Find the smallest number which when divided by 28 and 32 leaves remainder 8 and 12 respectively.