

$$\begin{aligned} 26 &= 2 \times 13 \\ 91 &= 7 \times 13 \\ 51 &= 3 \times 17 \end{aligned}$$

$$26, 51, 91$$

$$\begin{array}{r} 213 \\ 7 \\ \hline 91 \end{array}$$

# MATHEMATICS - CBSE

## X CLASS REVISION PROGRAMME

6. Using fundamental theorem of arithmetic, find the H.C.F of 26, 51 and 91.  $\rightarrow 1$
7. The HCF and LCM of two numbers are 9 and 90 respectively. If one number is 18, find the other.  $\rightarrow 215$
8. Prove the following are irrational numbers

a)  $5 - \sqrt{3} = \frac{a}{b}$

b)  $(3\sqrt{2})^2 = \frac{a^2}{b^2}$

c)  $\left(\frac{1}{\sqrt{2}}\right)^2 = \frac{a^2}{b^2}$

3 MARKS :

1. Prove that  $\sqrt{5}$  is an irrational number. (March - 2019, 2023)
2. Find the HCF and LCM of 26, 65 and 117, using prime factorisation.  $13 = \text{HCF}$   
 $2 \times 13 = 26$     $5 \times 13 = 65$     $9 \times 13 = 117$     $130$     $1170$     $\text{LCM} = 1170$  (March - 2023)
3. Three bells ring at intervals of 6, 12 and 18 minutes. If all the three bells rang at 6 a.m., when will they ring together again ?  $6:36 \text{ a.m.}$  (March - 2023)
4. Prove that  $3 + 7\sqrt{2}$  is an irrational number, given that  $\sqrt{2}$  is an irrational number.  $5 \mid 12180, 7575$   
 $5 \mid 3630, 1515$  (March - 2023, 2018)
5. Find by prime factorisation the LCM of the numbers 18180 and 7575. Also, find the HCF of the two numbers.  $1225, 303$  (March - 2023)
6. Find the L.C.M and H.C.F of 404 and 96 and verify that L.C.M  $\times$  H.C.F = Product of the two numbers. (March, 2018)
7. Two tankers contain 620 litres and 840 litres of diesel respectively. Find the maximum capacity of a container which can measure the diesel of both the tankers in exact number of times. (March - 2014, 2015, 2016)