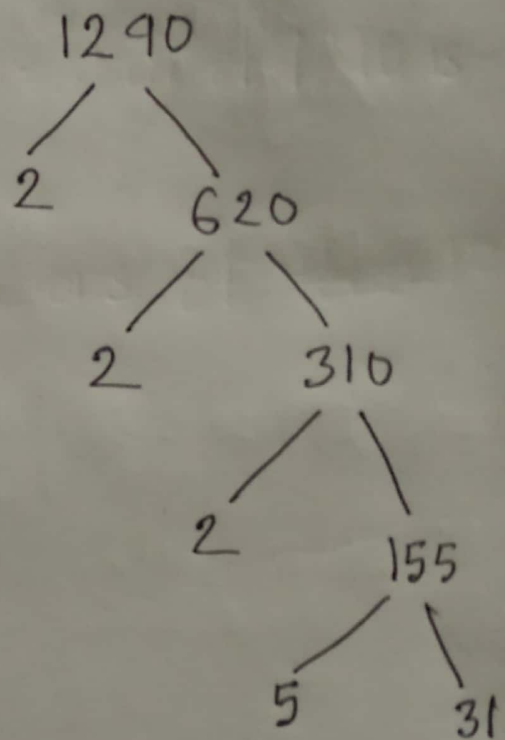


# Find the Prime factorization of 1240 using three different methods.

⇒ Division method :-

$$\begin{array}{r}
 2 \overline{)1240} \\
 \underline{2 \phantom{0}620} \\
 2 \phantom{0}310 \\
 \underline{5 \phantom{0}155} \\
 31
 \end{array}$$

Tree Diagram :-



Multiplication method :-

$$\begin{aligned}
 1240 &= 2 \times 620 = 2 \times 2 \times 310 = 2^2 \times 2 \times 155 = 2^3 \times 5 \times 31 \\
 &= 2^3 \cdot 5 \cdot 31
 \end{aligned}$$

∴ Therefore, the prime factorization of 1240 is  $= 2^3 \cdot 5 \cdot 31$

2. Find the all factors of 1290

⇒ Calculation for all factors

$$\begin{aligned}1290 &= 1 \times 1290 \\ &= 2 \times 620 \\ &= 4 \times 310 \\ &= 5 \times 298 \\ &= 8 \times 155 \\ &= 10 \times 129 \\ &= 20 \times 62 \\ &= 40 \times 31\end{aligned}$$

The factors of 1290 are

1, 2, 4, 5, 8, 10, 20, 31, 40, 62, 1290, 155, 298, 310, 620, 1290.

3. Find the all Prime factors of 1290

$$\begin{aligned}\Rightarrow & \begin{array}{r} 2 \overline{) 1290} \\ \underline{2} \phantom{0} \\ 2 \overline{) 620} \\ \underline{2} \phantom{0} \\ 2 \overline{) 310} \\ \underline{5} \phantom{0} \\ 5 \overline{) 155} \\ \underline{31} \end{array}\end{aligned}$$

Therefore, the prime factors of 1290 are

2, 5, 31

9. Find the all composite factors of 1240

$$\begin{aligned}\Rightarrow 1240 &= 1 \times 1240 \\ &= 2 \times 620 \\ &= 4 \times 310 \\ &= 5 \times 248 \\ &= 8 \times 155 \\ &= 10 \times 124 \\ &= 20 \times 62 \\ &= 40 \times 31\end{aligned}$$

The composite factors of 1240 are =

4, 8, 10, 40, 62, 124, 248, 310, 620, 1240.