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221-15-5777  
Section - Y

① Qus: Find the Prime Factorization of 1240 using three different methods.

Ans:

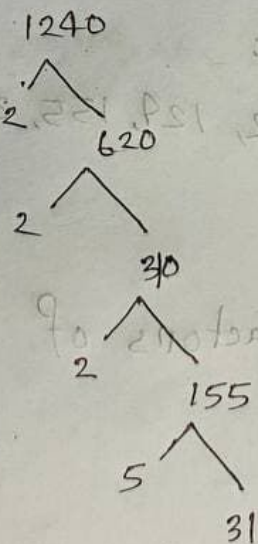
\* Division method.

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

\* Multiplication Method.

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

\* Tree Diagram method



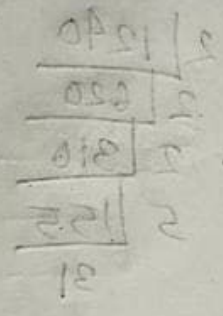
The prime factorization of 1240 =  $2^3 \cdot 5 \cdot 31$ . (Ans)

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② Que: Find the all factors of 1240

Ans: calculation for all factors

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



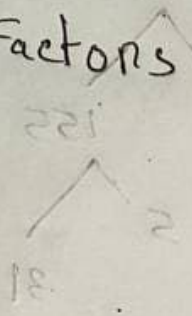
The factors of 1240 are :

- 1, 2, 4, 5, 8, 10, 20, 31, 40, 62, 124, 155, 248, 310, 620, 1240  
 (Ans.)

③ Find the all Prime Factors of 1240

Ans:

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



Therefore, the Prime factors of 1240 are = 2, 5, 31.

(Ans)



④ Find the all composite factors of 1240

Ans;

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

The composite factors of 1240 are =

4, 8, 10, 20, 40, 62, 124, 248, 310, 620, 1240.

(Ans)