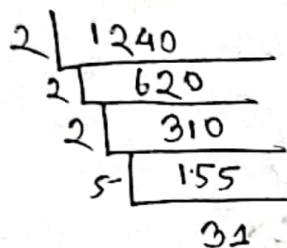
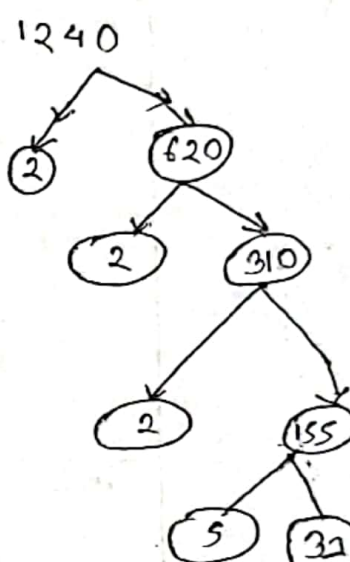


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1. Find the prime factorization of 1240 using three different methods.

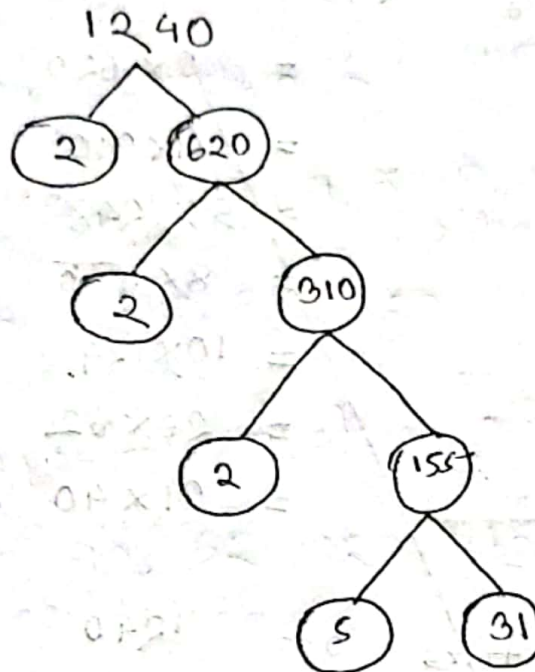
Answer:

Division method	Multiplication method	Tree Diagram
 <p>Ans The prime factorization is $= 2^3 \cdot 5^1 \cdot 31$</p>	<p>1240 = 2 $1240 = 2 \times 620$ $= 2 \times 2 \times 310$ $= 2 \times 2 \times 2 \times 155$ $= 2 \times 2 \times 2 \times 5 \times 31$</p>	

The prime factorization of 1240 is $= 2^3 \cdot 5^1 \cdot 31^1$

2. Find the all factors of 1240 using tree Diagram.

Answer -



The Prime factorization 1240 is $= 2^3 \cdot 5 \cdot 31$

$$\begin{aligned} \therefore \text{Total number of factors of } 1240 &= \frac{(1+1)(1+1)(1+1)}{(1+1)} \\ &= (3+1)(1+1)(1+1) \\ &= 4 \cdot 2 \cdot 2 \\ &= 16 \end{aligned}$$

$$\begin{aligned} \text{Now, } 1240 &= 1 \times 1240 \\ &= 2 \times 620 \\ &= 4 \times 310 \\ &= 8 \times 155 \\ &= 10 \times 124 \end{aligned}$$

$$= 20 \times 62$$

$$= 31 \times 40$$

The factors of 1240 are 1, 2, 4, 5, 8, 10, 20, 31, 40, 62, 124, 155, 248, 310, 620, 1240

3. Find the all prime factors of 1240

Answer:

$$\begin{array}{r} 2 \overline{) 1240} \\ \underline{240} \\ 620 \\ 2 \overline{) 620} \\ \underline{310} \\ 310 \\ 2 \overline{) 310} \\ \underline{155} \\ 155 \\ 5 \overline{) 155} \\ \underline{31} \\ 31 \end{array}$$

$$\therefore 1240 = 2^3 \cdot 5 \cdot 31$$

The prime factors of 1240 = $2^3 \cdot 5 \cdot 31$

4. Find the all composite ~~Number~~ factors of 1240.

Answer: From problem 2 we get the factors of 1240 are 1, 2, 4, 5, 8, 10, 20, 31, 40, 62, 124, 155, 248, 310, 620, 1240.

So the composite factors of 1240 are 4, 8, 10, 20, 40, 62, 124, 155, 248, 310, 620, 1240.