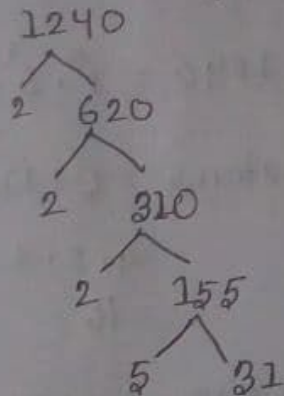


Homework : -

1: The prime factorization of 1240 in Division method:-

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

$\therefore$  The prime factorization of 1240 =  $2^3 \cdot 5^1 \cdot 31^1$   
In Tree diagram method:-



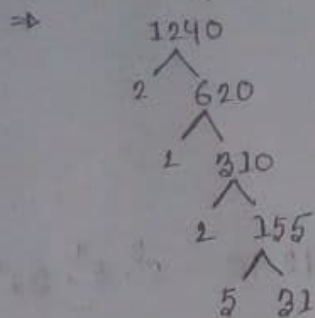
$\therefore$  The prime factorization of 1240 =  $2^3 \cdot 5^1 \cdot 31^1$

In Multiple method :-

$$\begin{aligned} 1240 &= 2 \times 620 \\ &= 2 \times 2 \times 310 \\ &= 2^2 \times 2 \times 155 \\ &= 2^3 \times 5 \times 31 \\ &= 2^3 \cdot 5^1 \cdot 31^1 \end{aligned}$$

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

2. Find all the ~~prime~~ factors of 1240 using tree diagram.



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

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

Calculation for all factors :-

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

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

3. The prime factors of 1240 are: - 2, 5, 31

4. From 2 Number's answers, we can see that the all composite factors of 1240 are: 4, 8, 10, 20, 40, 124, 155, 248, 310, 620, 1240.