

1. Prime factorization of 1240:

Division method:

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

Multiplication method:

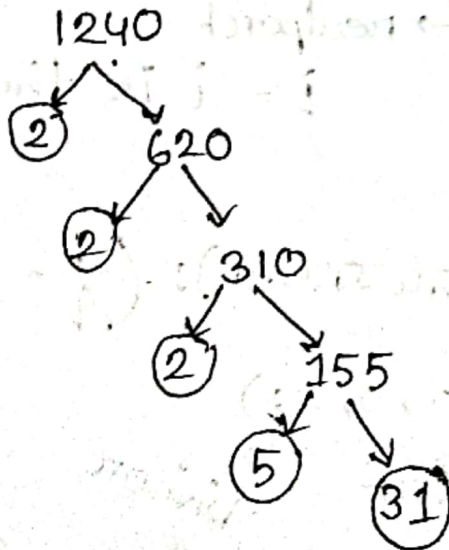
$$1240 = 2 \times 620$$

$$= 2 \times 2 \times 310$$

$$= 2^2 \times 2 \times 155$$

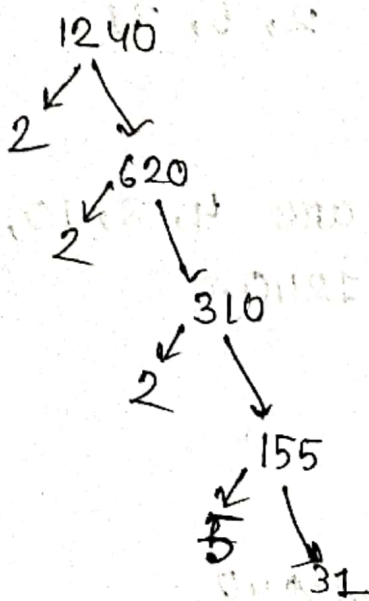
$$= 2^3 \times 5 \times 31$$

Tree Diagram:



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

2.



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

the prime factorization of 1240 is $2^3 \cdot 5 \cdot 31$

so, the total number of factors of 1240 is

$$\begin{aligned} &= (3+1)(1+1)(1+1) \\ &= 4 \times 2 \times 2 \\ &= 16 \end{aligned}$$

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

3. All prime factors of 1240 are 2, 5, 31.

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