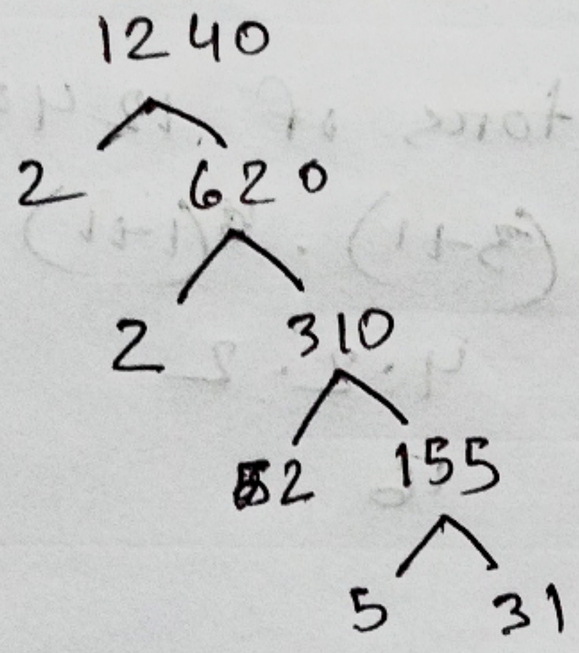
1. Find the prime factorization of 1240 using three different methods.

Division method:

$$
\begin{array}{r|l}
2 & 1240 \\
2 & 620 \\
2 & 310 \\
5 & 155 \\
 & 31
\end{array}
$$

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

Tree Diagram:



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

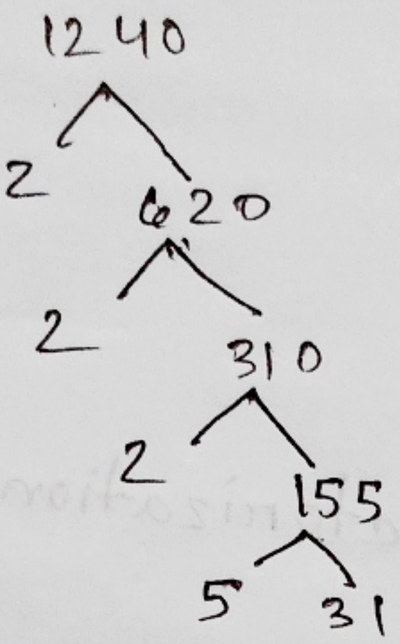
Multiplication Method:

$1240 = 2 \times 620 = 2 \times 2 \times 310 = 2 \times 2 \times 155 = 2^3 \times 5 \times 31$

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

2. Find the all factor of 1240 using tree diagram.

☞ Tree Diagram:



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

So, the total number of factors of 1240 is

$= (3+1) \cdot (1+1) \cdot (1+1)$

$= 4 \cdot 2 \cdot 2$

$= 16$

~~Calculation~~

~~1600 = 1 × 1~~

$1240 = 1 \times 1240$

$= 2 \times 620$

$= 4 \times 310$

$= 5 \times 248$

$= 8 \times 155$

$= 10 \times 124$

$= 20 \times 62$

$= 31 \times 40$

The factor of 1240 are:

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

(3.) Find the all prime factor of 1240.

$$
\begin{array}{r|l}
2 & 1240 \\
\hline
2 & 620 \\
\hline
2 & 310 \\
\hline
5 & 155 \\
\hline
 & 31
\end{array}
$$

Therefore, all prime factor of 1240 is = 2, 5, 31

—o—

(4) Find the all composite factors 1240.

$1240 = 1 \times 1240$

$= 2 \times 620$

$= 4 \times 310$

$= 5 \times 248$

$= 8 \times 155$

$= 10 \times 124$

$= 20 \times 62$

$= 31 \times 40$

so, all the composite of 1240 are: 4, 8, 10, 20, 40, 62, 124, 155, 248, 310, 620, 1240.