

Exercise:

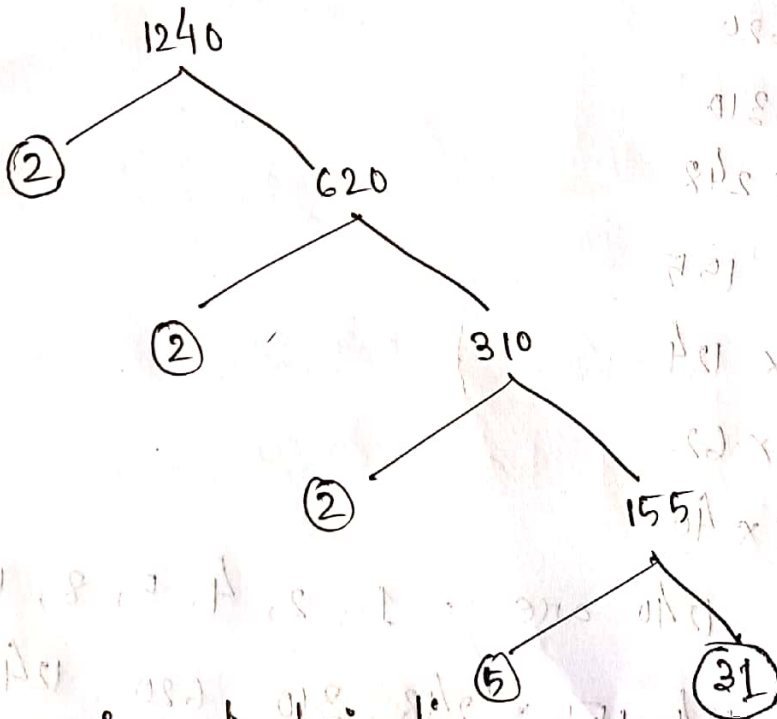
1. Prime factorization 1240 using three methods.

Division method:

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

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

Tree Diagram:



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

Multiplication Method:

EXAMPLE

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

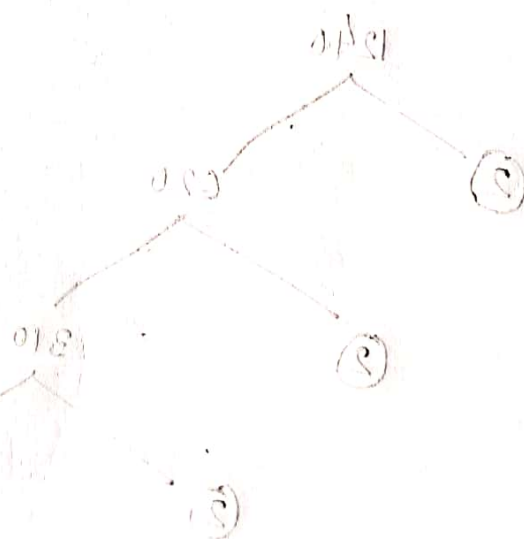
The prime factorization of 1240 is $= 2^3 \times 5 \times 31$

2. All the factors of 1240

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

\therefore The total factor number of 1240 is
 $= (3+1)(1+1)(1+1)$
 $= 16$

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



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

3. Find all the prime factors.

The prime factors of 1240 are = 2, 5, 31.

4. Find all the composite factors of

The composite factors of 1240 are = 4, 8, 10, 20, 40.

62, 124, 155, 248, 310, 620, 1240.
