Exercise:

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

- The prime factorization of 1240 using three different methods.

- Multiple Method:

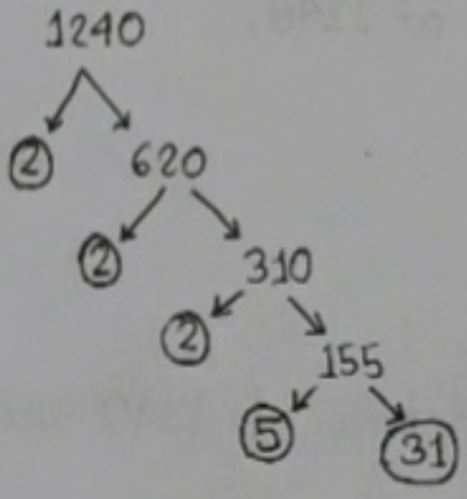
$1240 = 2 \times 620 = 2 \times 2 \times 310 = 2 \times 2 \times 2 \times 155$

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

- Division Method:

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

- Tree Diagram:



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

2. Find the all factors of 1240.

• Calculation for all factors,

$1240 = 1 \times 1240$

$= 2 \times 620$

$= 4 \times 310$

$= 5 \times 248$

$= 8 \times 155$

$= 10 \times 124$

$= 20 \times 62$

$= 31 \times 40$

The 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.

• From no. 1 we get that,

$1240 = 2^3 \times 5 \times 31$

Therefore, all the prime factors of 1240 are, = 2, 5, 31.

4. Find the all composite factors of 1240.

• From no. 2 we get that,

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

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