

Exercise:

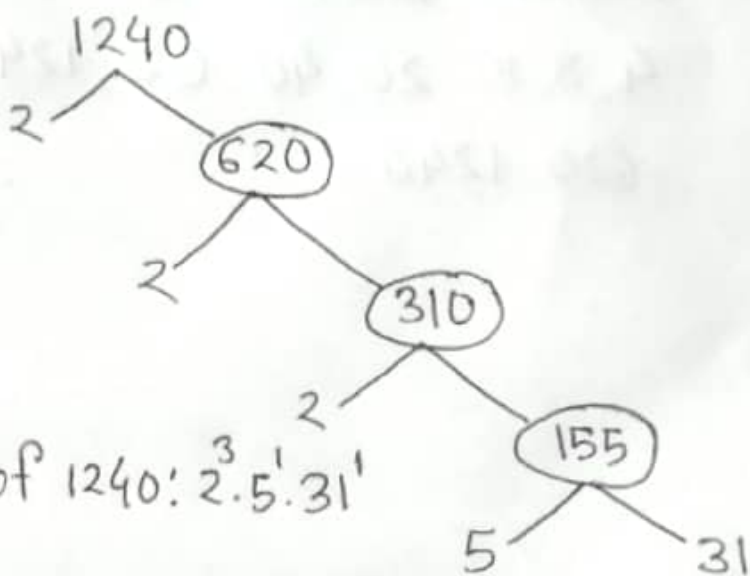
1. Find the Prime factorization of 1240 using three different methods.

Division method:

$$\begin{array}{r} 2 \overline{)1240} \\ \underline{2 \phantom{00}620} \\ 2 \phantom{00}310 \\ \underline{2 \phantom{00}155} \\ 5 \phantom{00}155 \\ \underline{5 \phantom{00}31} \end{array}$$

Prime factor of 1240:  $2^3 \cdot 5^1 \cdot 31^1$

Tree diagram:



Prime factor of 1240:  $2^3 \cdot 5^1 \cdot 31^1$

2. Find the all factors of 1240

Calculation of all factors:

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

Multiplication method:

$$\begin{aligned} 1240 &= 2 \times 620 \\ &= 2 \times 2 \times 310 \\ &= 2 \times 2 \times 2 \times 155 \\ &= 2 \times 2 \times 2 \times 5 \times 31 \\ \therefore \text{Prime factor} \\ \text{of } 1240 &: 2^3 \cdot 5^1 \cdot 31^1 \end{aligned}$$

$\therefore$  All the factors of 1240: 1, 2, 4, 5, 8, 10, 20, 31, 62, 124, 155, 248, 310, 620, 1240.

3. Find the all Prime factors of 1240.

Prime factor of 1240 are; 2, 5, 31

4. Find the all Composite factors of 1240.

The Composite factor of 1240:

4, 8, 10, 20, 40, 62, 124, 248, 155, 310, 620, 1240.