

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

The composite factors of 1240:

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

③ Find the all Prime factors of 1240.

$$(1 \times 1240) (2 \times 620) (4 \times 310) (5 \times 248) (8 \times 155)$$

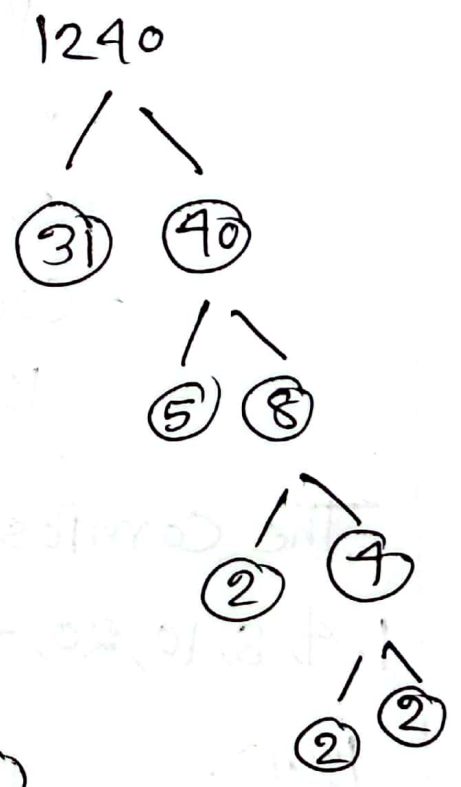
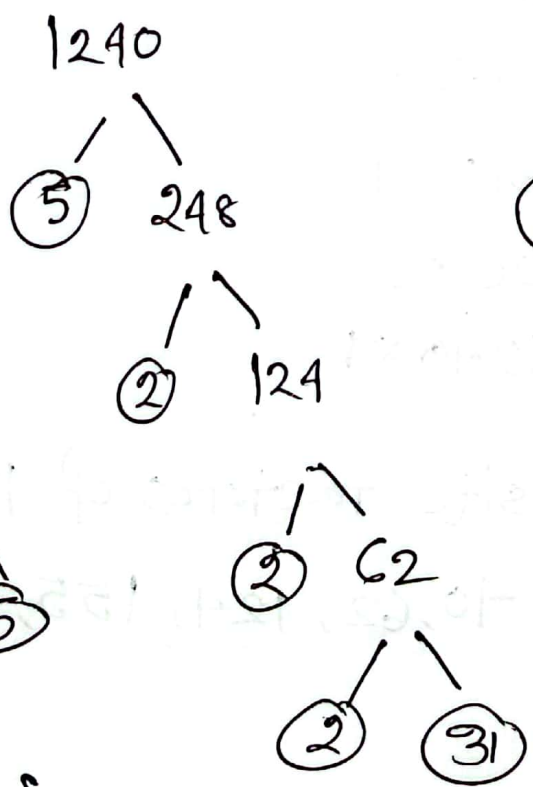
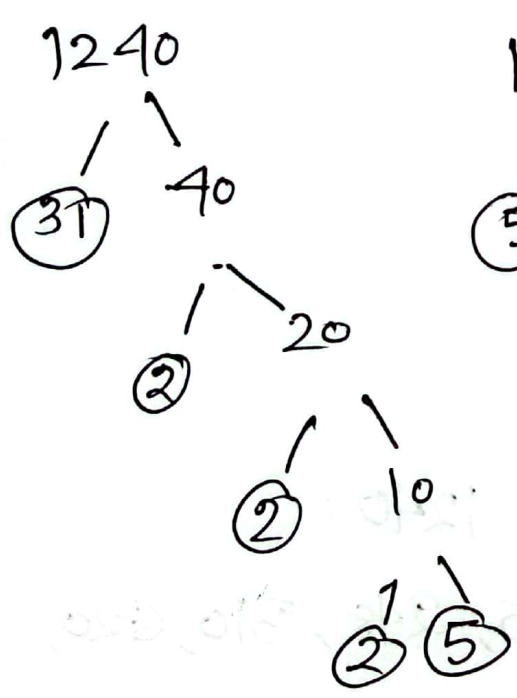
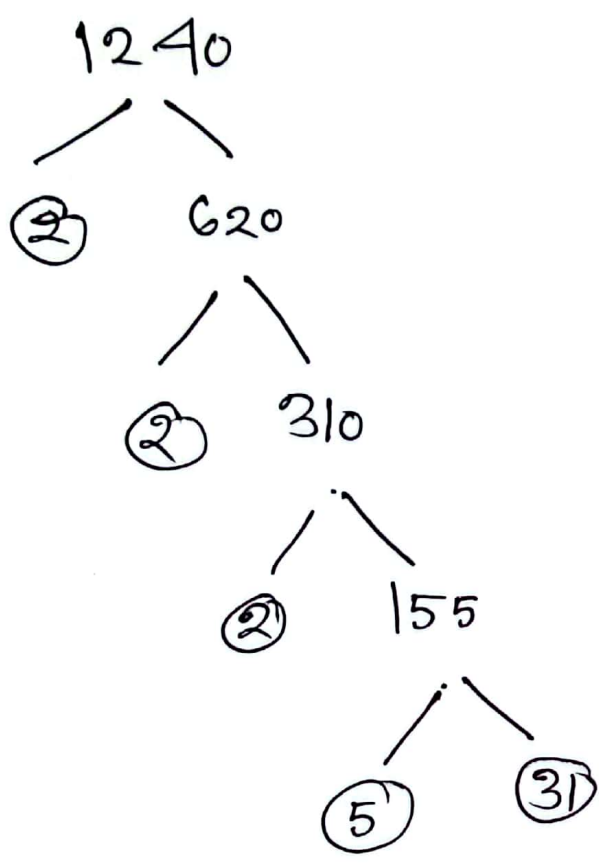
$$(10 \times 124) (20 \times 62) (31 \times 40) (40 \times 31) (62 \times 20) (124 \times 10)$$

$$(155 \times 8) (248 \times 5) (310 \times 4) (620 \times 2) (1240 \times 1)$$

Prime Factors of 1240 : 2, 2, 2, 5, 31

Exercise: 2 Therefore, the Prime factorization

1240 is = $2^3 \cdot 5 \cdot 31$



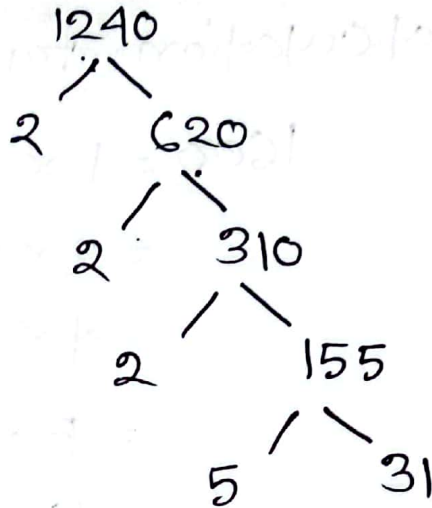
∴ All factors = { 1, 2, 4, 5, 8, 10, 20, 31, 40, 62, 124, 155, 248, 310, 620, 1240 }

Exercise: Find the Prime factorization of 1240 using three different methods.

Division method:

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

Tree method:



Multiplication method:

$$\begin{aligned} 1240 &= 2 \times 620 = 2 \times 2 \times 310 = 2 \times 2 \times 2 \times 155 \\ &= 2^3 \times 5 \times 31 \\ &= 2^3 \cdot 5 \cdot 31 \end{aligned}$$

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