

2nd class

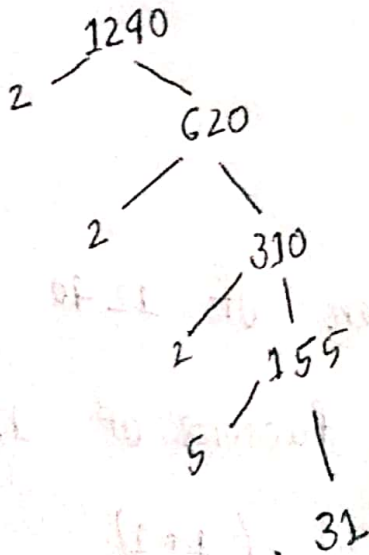
H.W

1) Find the prime factorization of 1240

Division method

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

Tree diagram



Multiplication method

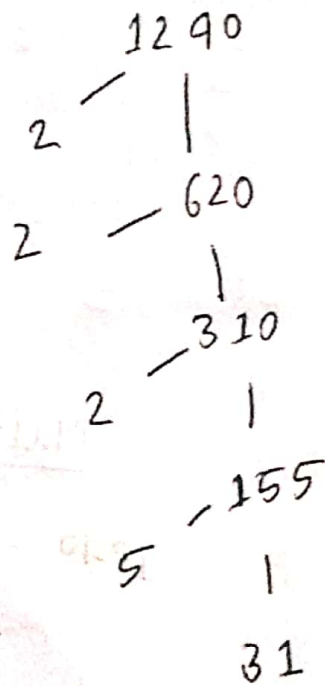
$$\begin{aligned} 1240 &= 2 \times 620 \\ &= 2 \times 2 \times 310 \\ &= 2 \times 2 \times 2 \times 155 \\ &= 2 \times 2 \times 2 \times 5 \times 31 \end{aligned}$$

Therefore, the prime factorization of 1240 is

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

② Finding the all factors of 1240 using tree diagram.

Tree diagram:



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

The total number of factors of 1240 is

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

$$= 4 \cdot 2 \cdot 2$$

$$= 16$$

(Ans)

calculation of all factors:

$$1240 = 1 \times 1240$$

$$= 2 \times 620$$

$$= 4 \times 310$$

$$= 8 \times 155$$

$$= 5 \times 248$$

$$= 10 \times 124$$

$$= 20 \times 62$$

$$= 31 \times 40$$

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

③ Prime factors: 2, 5, 31

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