* next week past continous tesne presentation class
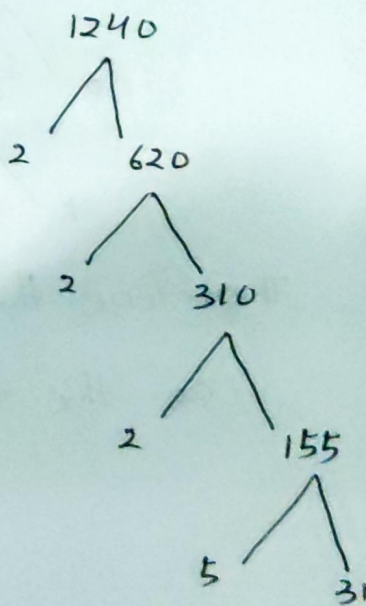
24/01/22

Mat - III

1. Finding the prime Factorization of 1240. using three different methods.

i. Division method:-

ii. Tree diagram:-

```
2 | 1240
2 | 620
2 | 310
5 | 155
    31
```

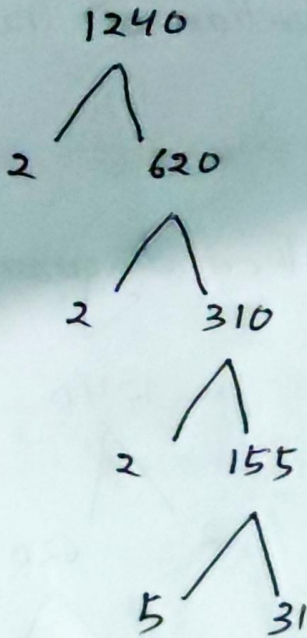

iii. Multiplication method:-

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

$= 2^2 \times 2 \times 155$

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

Therefore, the prime Factorization of 1240 is $= 2^3. 5. 31$

2. Finding the all factors of 1240 using tree diagram.

i. Tree diagram:-

$$1240$$

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

∴ So, the total number of factors of 1240 is

$$= 2^3 . 5 . 31$$

$$= (3+1) . (1+1)(1+1)$$

$$= 4 . 2.2$$

$$= 16$$

3. Finding the all prime factors of 1240.

$$1240 = 2 \times 3620 = 2 \times 2 \times 310 = 2^2 \times 2 \times 155 = 2^3 \times 5 \times 31$$

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

4. Finding the all composite factors of 1240.

composite factors :-

$1240 = 2, \cancel{620, 310, 4, 8, 155, 5, 31}$

$= \cancel{2, 4, 8, 5, 31, 155, 310, 620}$

$= \cancel{4, 8, 155, 310, 620}$

$1240 = 4, 8, 10, 20, 40, 62, 124, 155, 248, 310, 620,$
$\qquad 1240$