RPF SI & CONSTABLE 2024

रेल रक्षक बैच

MATHS

LCM & HCF



LIVE 21-05-2024 9AM



$(649)^2$

- 9 का Duplex
- 49 का Duplex
- 649 का Duplex
- 64 का Duplex
- 6 का Duplex

81

$(94)^2 \Rightarrow 8836$

7 ¥

8 —

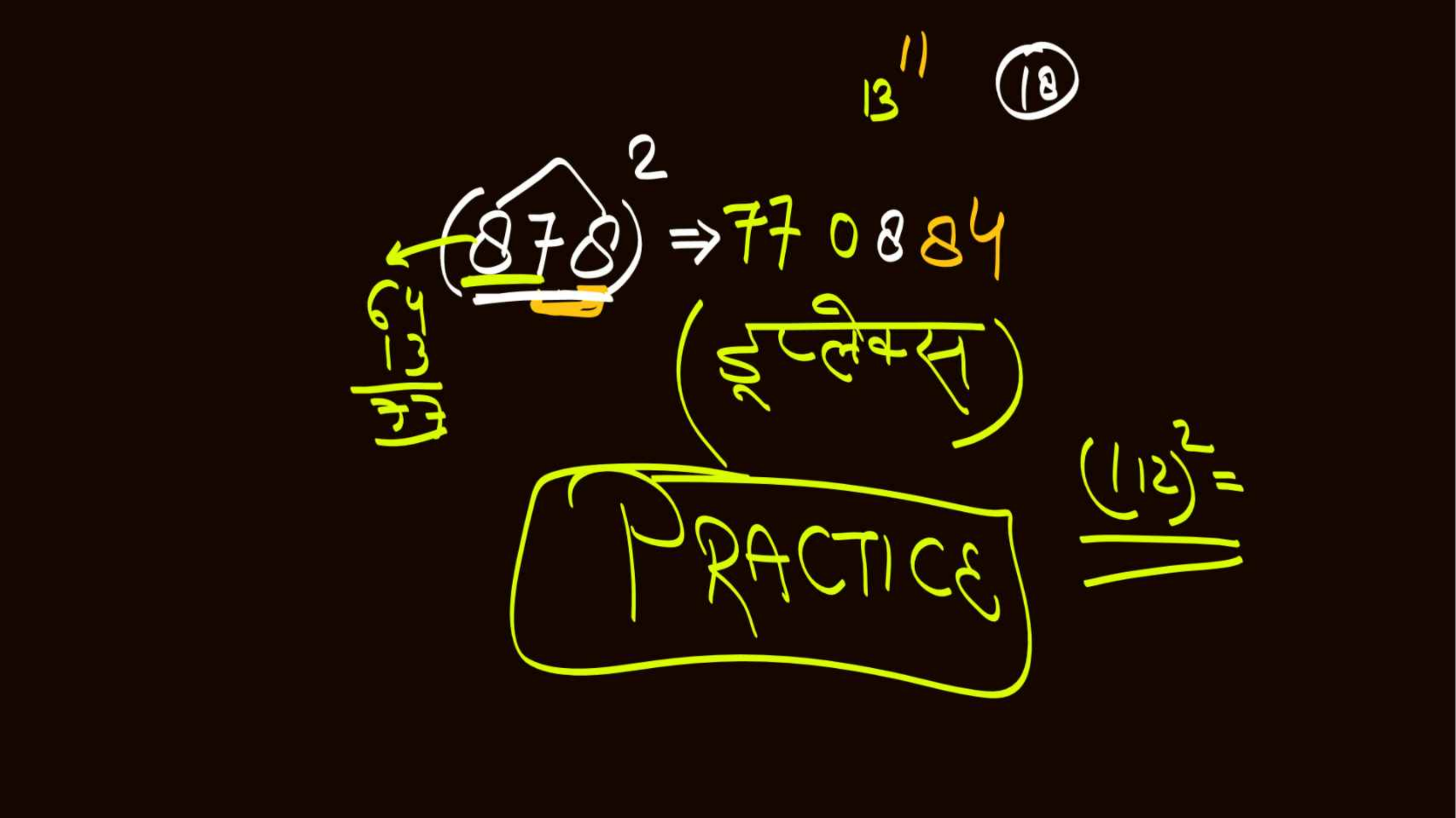
13 6

$(649)^2 = 421201$

6 ≠ 8

$(744)^2 \Rightarrow 553536$

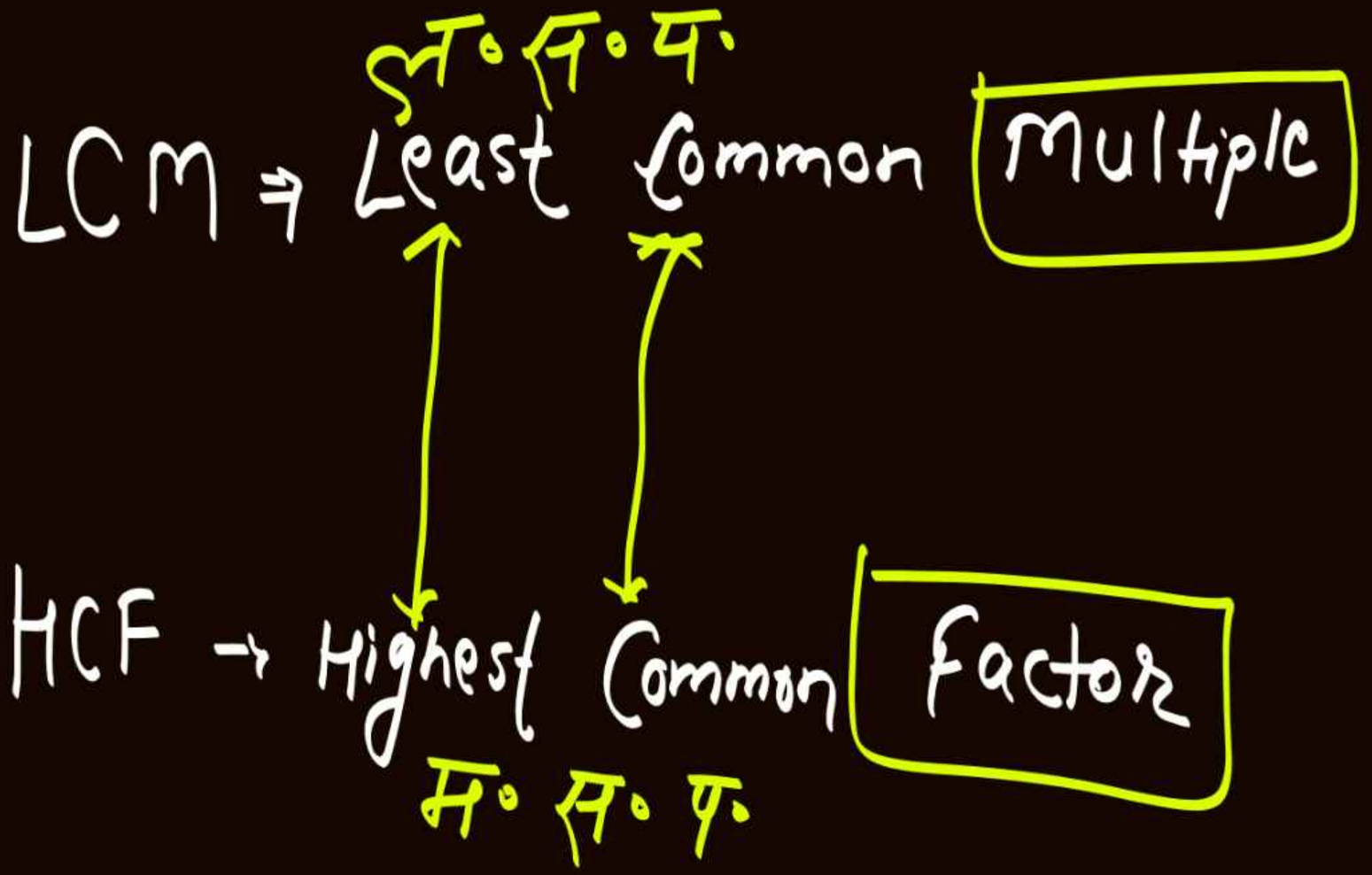
{Cube & cube root}


13^11
18
(878)^2 ⇒ 770884
878
13
64
इक्वेक्स
PRACTICE
(114)^2 =

12 ଏ

$(719)^2 \Rightarrow 516961$

777	968	ଉତ୍ତର
778	765	


ल॰ स॰ प॰
LCM → Least Common Multiple
HCF → Highest Common Factor
म॰ स॰ प॰

Least Common multiple

Multiple (गुणज) ⇒ 12 → 12, 24, 36, 48, 60, 12000, ---

Unlimited होते हैं

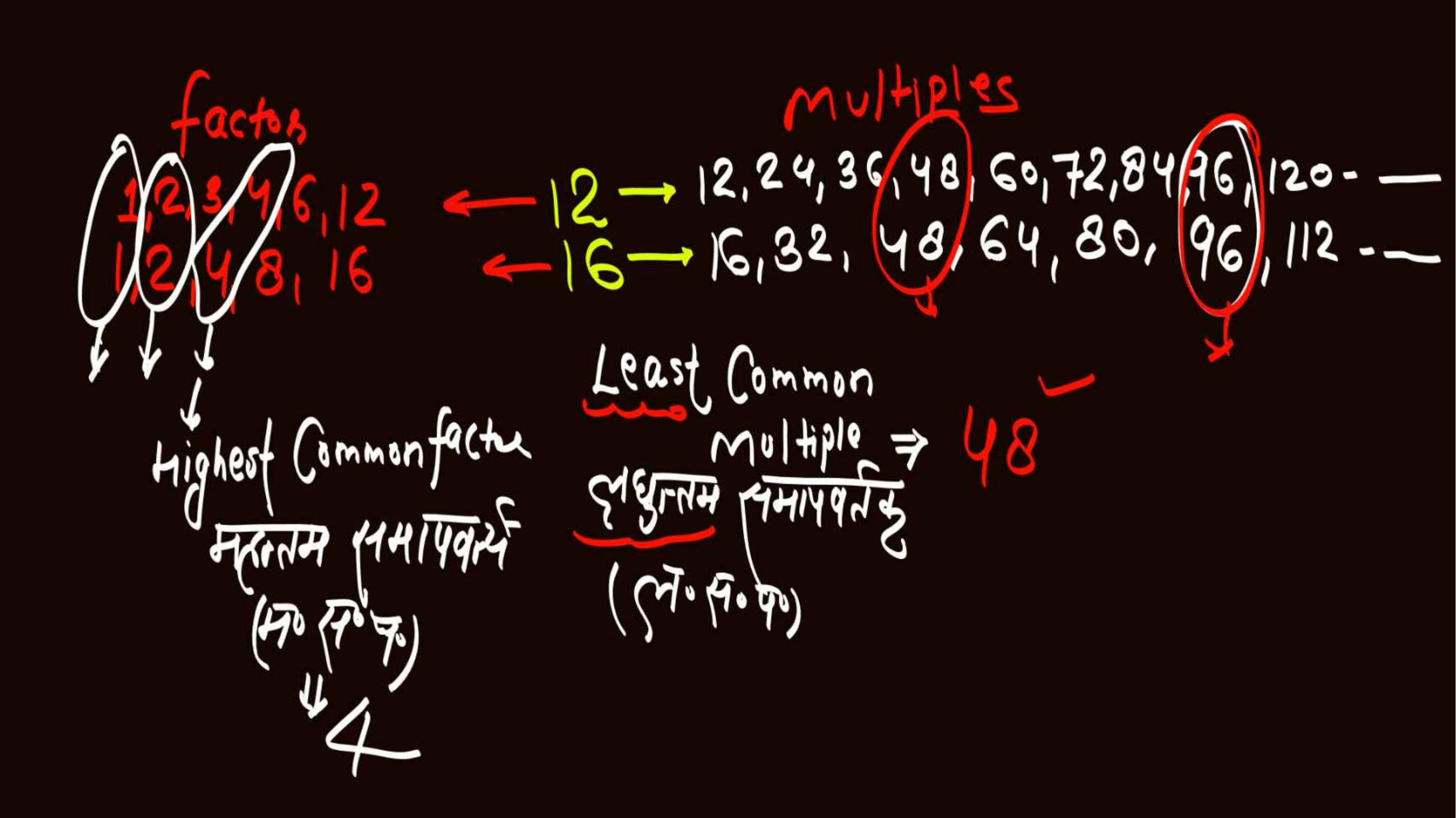
12×1000
12×0

* 1 (Universal Factor)

Factor (गुणज) ⇒ 12 ⇒ 1, 2, 3, 4, 6, 12

→ Limited होते हैं

(Highest Common Factor)


factors
1, 2, 3, 4, 6, 12
1, 2, 4, 8, 16
multiples
12 → 12, 24, 36, 48, 60, 72, 84, 96, 120 - —
16 → 16, 32, 48, 64, 80, 96, 112 - —
Highest Common factor
महत्तम समापवर्त्य
(म० स० प०)
⇓
4
Least Common Multiple ⇒ 48
लघुत्तम समापवर्त्य
(ल० स० प०)



❖ साधारण संख्याओं का LCM निकालना

18, 24, 30, 36 का LCM

LCM ⇓ 360

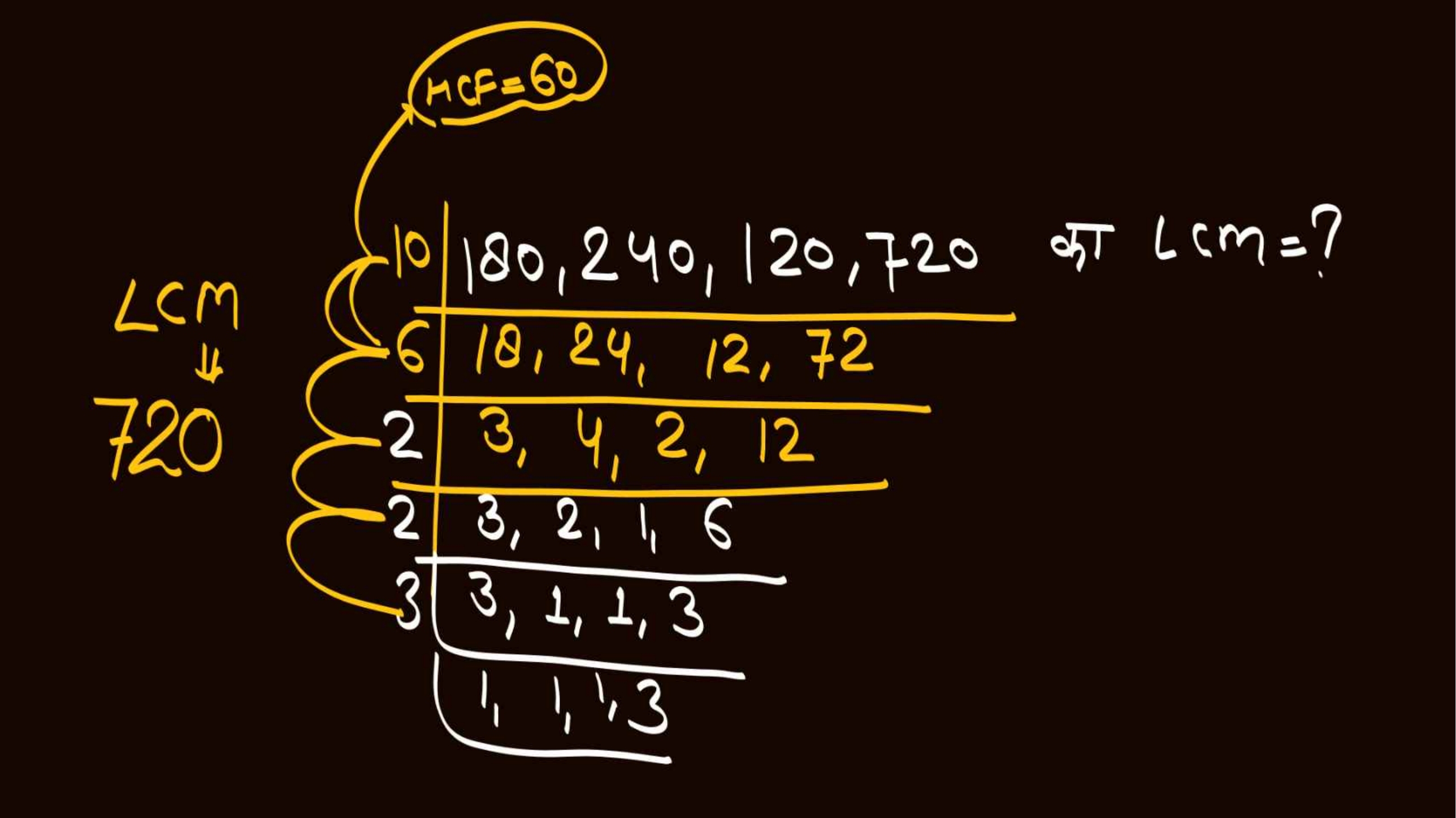
2	18, 24, 30, 36
2	9, 12, 15, 18
2	9, 6, 15, 9
3	9, 3, 15, 9
3	3, 1, 5, 3
5	1, 1, 5, 1
	1, 1, 1, 1

HCF ⇒ 2×2 = 4

2	12, 16
2	6, 8
3	3, 4
4	1, 4
	1, 1,

LCM ⇒ 2×2×3×4

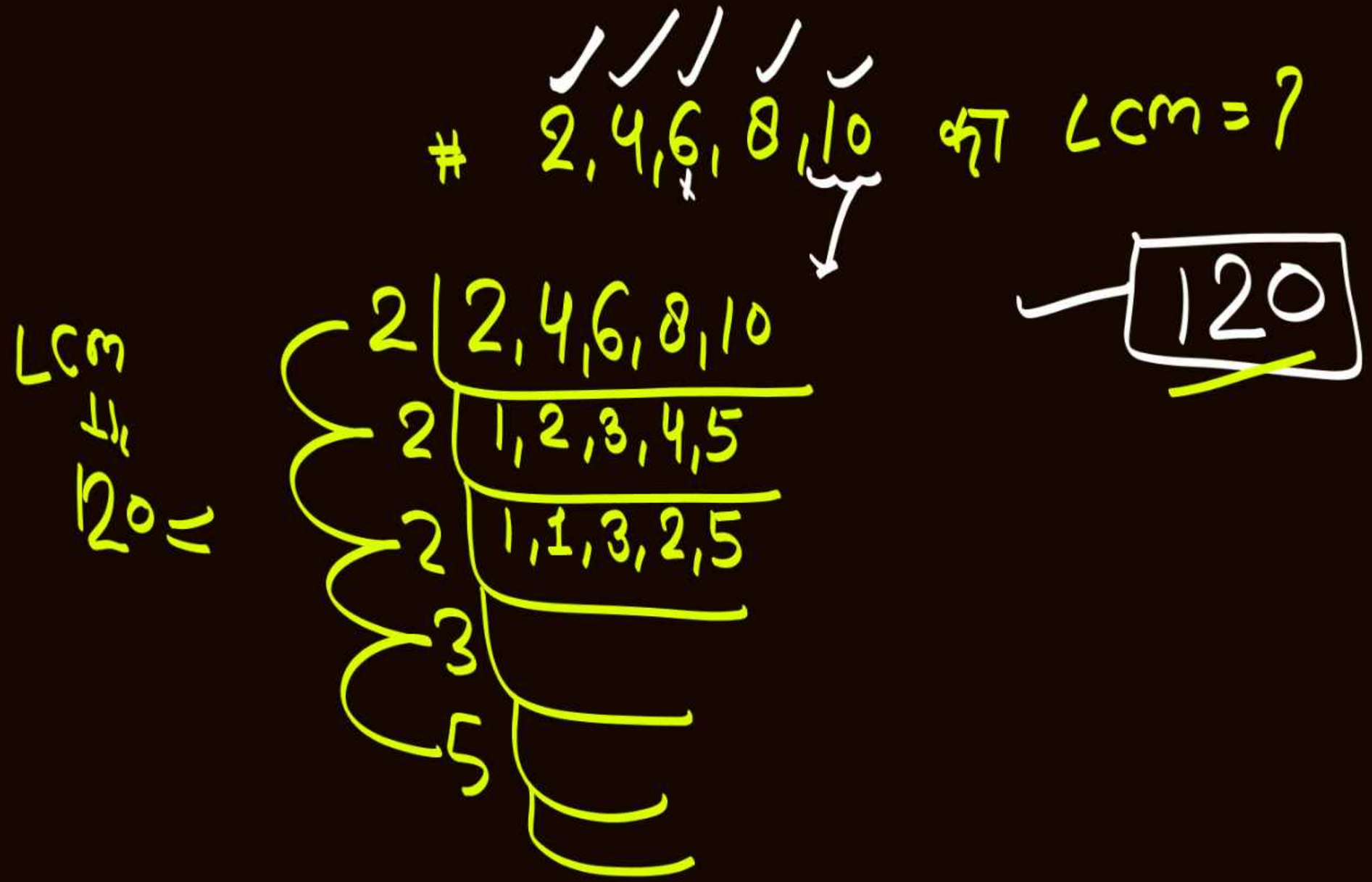
48


HCF=60
10 | 180, 240, 120, 720
6 | 18, 24, 12, 72
2 | 3, 4, 2, 12
2 | 3, 2, 1, 6
3 | 3, 1, 1, 3
1, 1, 1, 3
LCM
720
का LCM=?

LCM या तो सबसे बड़ी संख्या होता है या फिर सबसे बड़ी संख्या का कोई multiple होता है।

LCM is either the biggest no. or the multiple of the biggest no.

2, 4, 6, 8, 10 का LCM = ?



120

HCF = 5

1260
1890
2520

5 | 35, 45, 90, 70 का LCM = ?

7 | 7, 9, 18, 14

9 | 1, 9, 18, 2

2 | 1, 1, 2, 2

1, 1, 1, 1,

LCM = 630

$\frac{630}{35} = 18$

$\frac{630}{45} = 14$

$\frac{630}{90} = 7$

$\frac{630}{70} = 9$

1. What is the least common multiple of 120 and 450?

120 और 450 के लघुत्तम समापवर्तक क्या हैं?

(a) 2400

(b) 1800

(c) 3600

(d) 4800

10 | 120, 450
3 | 12, 45
4 | 4, 15
15 |

LCM = 120 × 15
= 1800

1800

120, 450