1 - 100 - 25

100 - 200 - 21

200 - 300 - 16

300 - 400 - 16

400 - 500 - 17

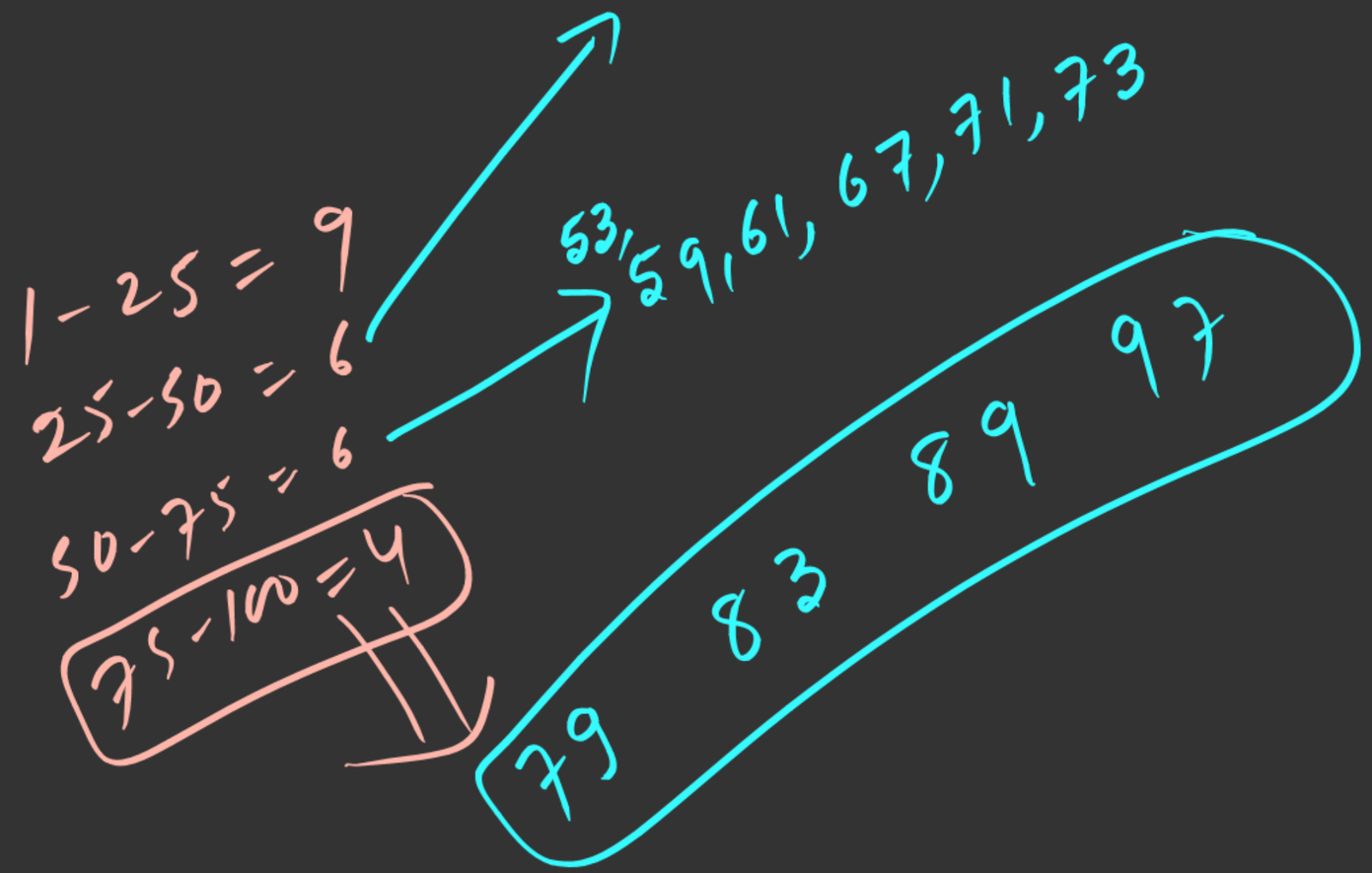
500 - 600 14

600 - 700 16

700 - 800 14

800 - 900 15

900 - 1000 14



Co-prime (सह अभाज्य सं०) ⟶

or

Relatively prime no. (सापेक्षतः अभाज्य सं०)

Eg:→ (2,3), (4,9), (8,9), (17,16), ... (HCF → 1)

Twin prime no. (जुड़वा अभाज्य सं०) :→

eg:→ ~~(2,3)~~, (3,5), (5,7), ~~(7,9)~~, ~~(9,11)~~, (11,13), ~~(13,15)~~, ~~(15,17)~~, (17,19), ~~(19,23)~~

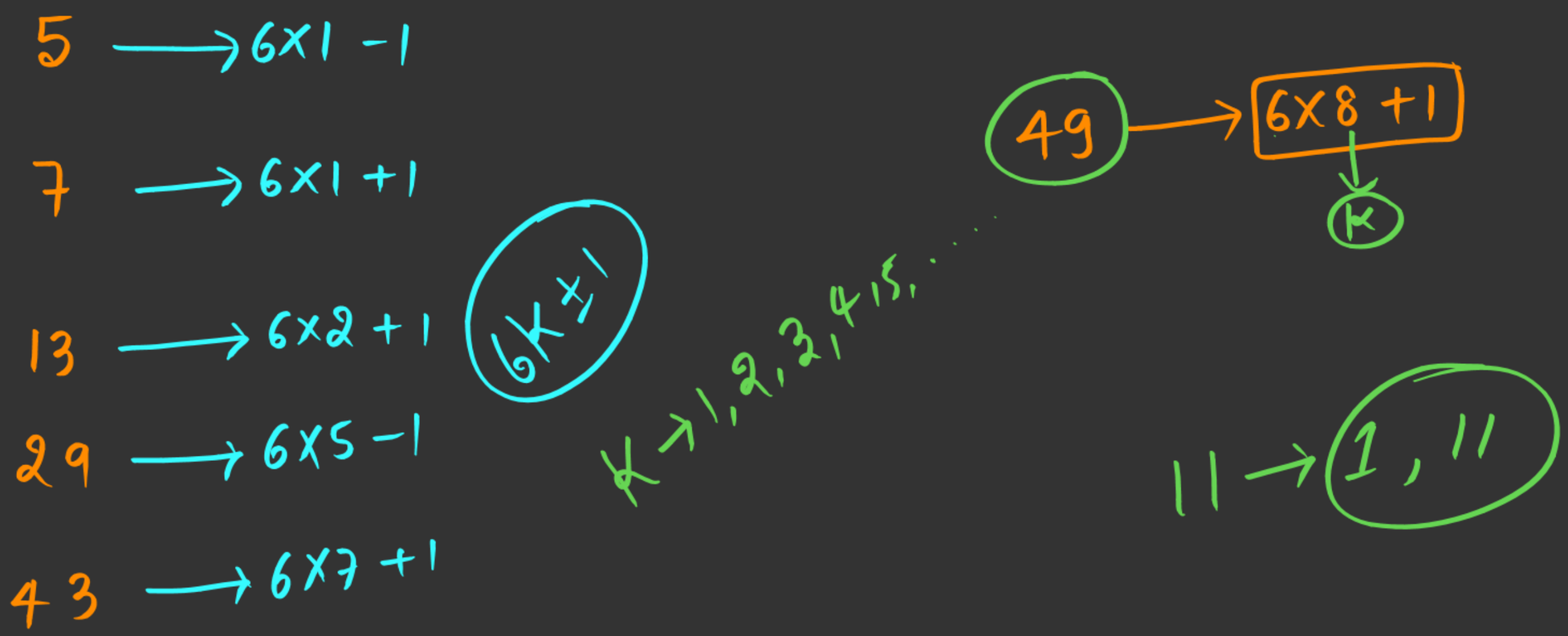
Note:→ 1 से 100 तक कुल 8 जोड़े जुड़वा अभाज्य सं० होते हैं। (4)

(3,5) (5,7), (11,13), (17,19), (29,31), (41,43), (59,61), (71,73)

composite no (भाज्य सं०/संयुक्त सं०) :→

eg:→ 4, 6, 8, 9, 10, 12, 14, 15, 16, 18, ...

Note:→ (iii) $(6k \pm 1)$ रूप


5 → 6x1 -1
7 → 6x1 +1
13 → 6x2 +1
29 → 6x5 -1
43 → 6x7 +1
6K±1
49 → 6x8 +1
K
K → 1, 2, 3, 4, 5, ...
11 → 1, 11

Prime no.

2	7
11	97
101	997

Number no.

1	9
10	99
100	999
1000	9999

5 → prime no.

1, 5

Complex no. (सम्मिश्र सं०)

Real no. (वास्तविक सं०)

Imaginary no. (काल्पनिक सं०) ✗

$i \rightarrow$ iota

$i = \sqrt{-1}$

$i^2 = -1$

Rational no (परिमेय सं०)

$\frac{p}{q}$ $p, q \rightarrow$ Integer

$q \neq 0$

(i) Natural no (प्राकृतिक सं०)

(ii) Whole no. (पूर्ण सं०)

(iii) Integer no. (पूर्णांक सं०)

(iv) Terminating (शांत दशमलव)

(v) Repeating (दुहराव)

Irrational no. अपरिमेय सं०

→ NON-Terminating
NON-Repeating

8:15pm

Yt

Railway Exams KCS

Rational no. (परिमेय सं०)

eg:→ $3, -6, -11, \sqrt{25}, 2.7, 1.2754, 0.2378\overline{54}, 0.\overline{37} = 0.373737\ldots$

$-\sqrt{49}, \sqrt{-16}, \frac{22}{7}, 0, \ldots$ etc

$\sqrt{-16}$ → Imaginary

$0.\overline{37} = \frac{37}{99}$ → Repeating

Irrational no (अपरिमेय सं०)

eg:→ $\pi, \sqrt{3}, \boxed{\sqrt[3]{8} = 2}$ (X), $\sqrt{7}+5, 5-\sqrt{2}, -\sqrt{11}$

$\sqrt{-31}$ → Imaginary no.

$0.23784569\ldots$ → Non-Terminating Non-Repeating

Note:→ ①

Rational no.

Terminating

$\frac{2}{5} = 0.4$ ✓

$\frac{4}{25} = 0.16$ ✓

0.374

3.5896

7.89543

Repeating

$\frac{1}{3} \rightarrow 0.33333\ldots = 0.\overline{3} = \frac{3}{9}$

$\frac{20}{3} \rightarrow 6.666666\ldots = 6.\overline{6} = 6 + \frac{6}{9}$

Digit (अंक)

→ (0, 1, 2, 3, 4, 5, 6, 7, 8, 9)

#

Number (संख्या)

1, 2, 3, 4, 5, 6, 7, 8, 9 → (9)

10, 11, 12, 13, ... 99 → (90)

100, 101, 102, ... 999 → (900)

$x^0 = 1$

$x \neq 0$

$0^0 = UD$

(i) 1 digit no → $9 \times 10^0 \rightarrow 9$

(ii) 2 digit no → $9 \times 10^1 \rightarrow 90$

(iii) 3 digit no → $9 \times 10^2 \rightarrow 900$

(iv) 4 digit no → $9 \times 10^3 \rightarrow 9000$

(v) n digit no → $9 \times 10^{(n-1)}$

5 अंकों की कुल संख्या $= 9 \times 10^4$

$= 9 \times 10000$

$= 90,000$

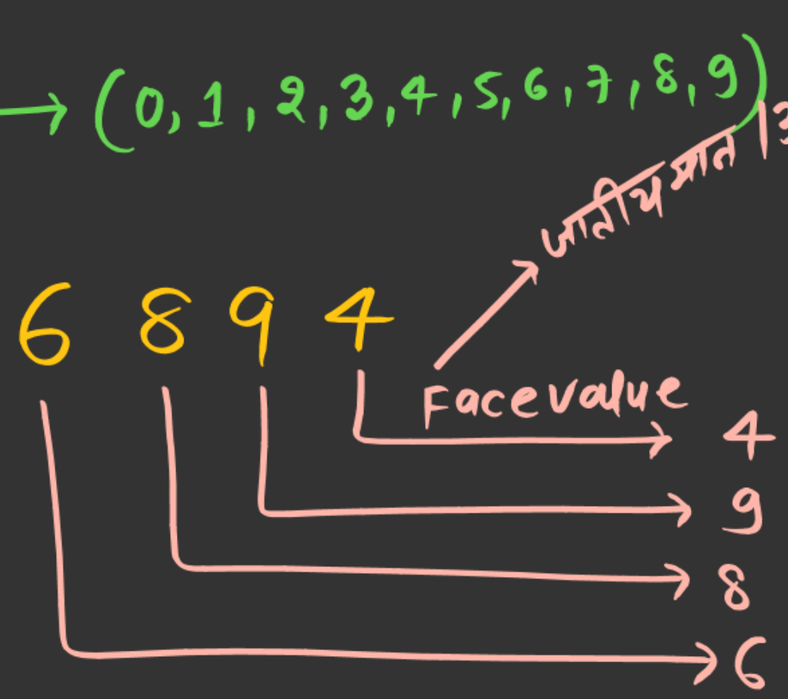
100 अंकों की कुल संख्या $= 9 \times 10^{(n-1)}$

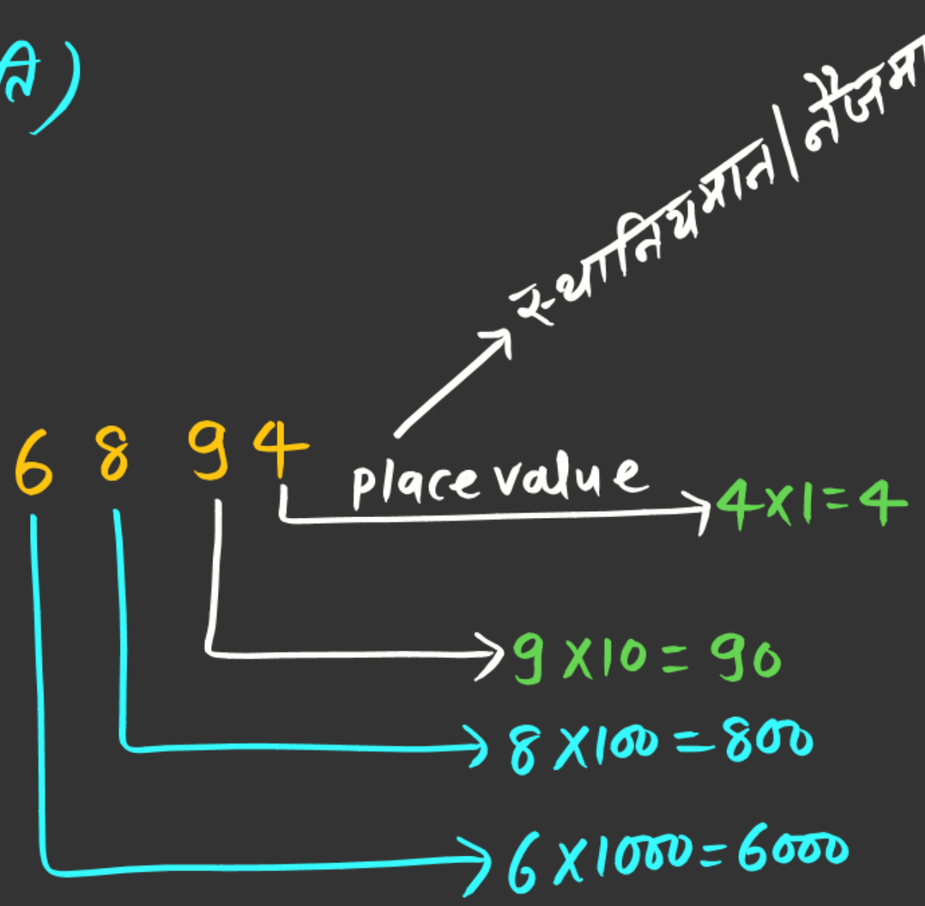
$= 9 \times 10^{99}$

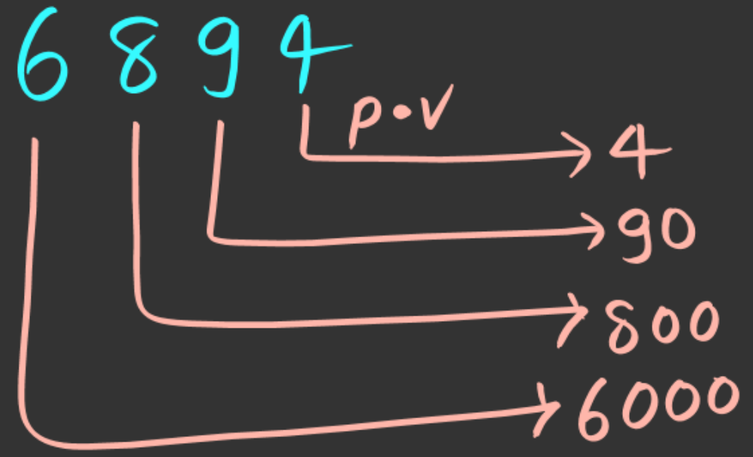
10000, 10001, ... 99999

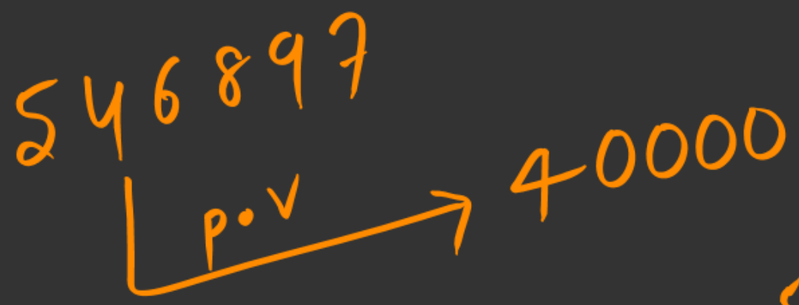
Decimal number system (दशमलव पद्धति)

→ (0, 1, 2, 3, 4, 5, 6, 7, 8, 9)

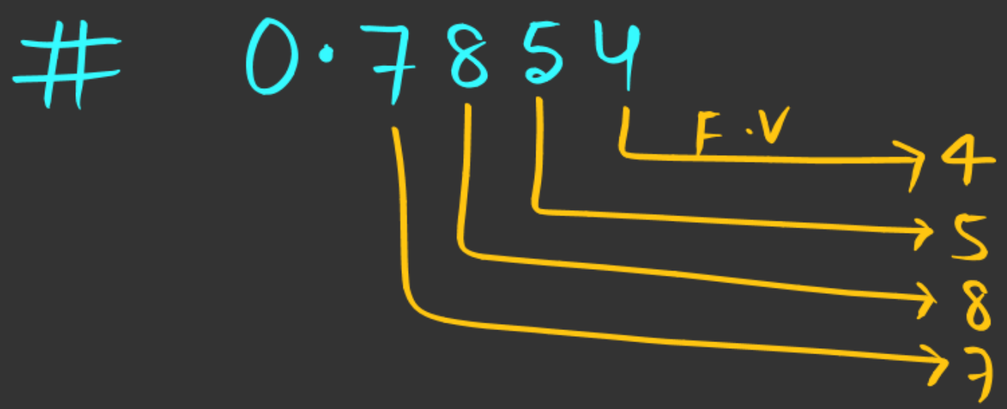


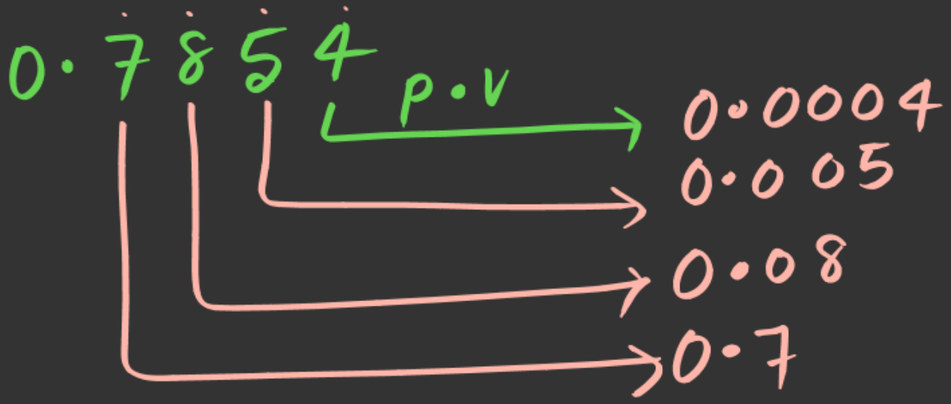



6894
P.V
4
90
800
6000


546897
P.V
40000


6054
000


#
0.7854
F.V
4
5
8
7


0.7854
P.V
0.0004
0.005
0.08
0.7

0.7854 → P.V → 4 → स्थानिय मान

$0.0004 = \frac{4}{10000} = \frac{4}{10^4} = 4 \times 10^{-4}$

$0.005 = \frac{5}{1000} = 5 \times 10^{-3}$

4) $\frac{10}{8}$ (.25
$\frac{20}{20}$

$\frac{1}{x} = x^{-1}$

$\frac{1}{x^n} = x^{-n}$

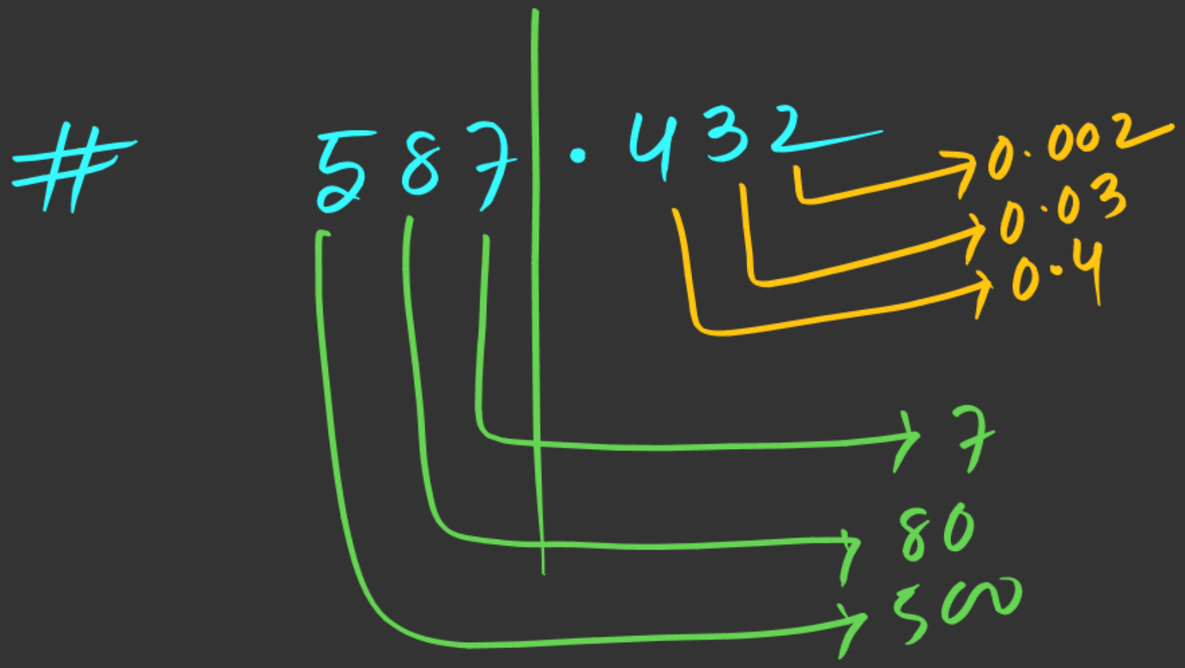
Ans

$\frac{1}{4}$ में 5 का स्थानिय मान निकाले।

$\frac{1}{4} = 0.25$ → $0.05 = 5 \times 10^{-2}$

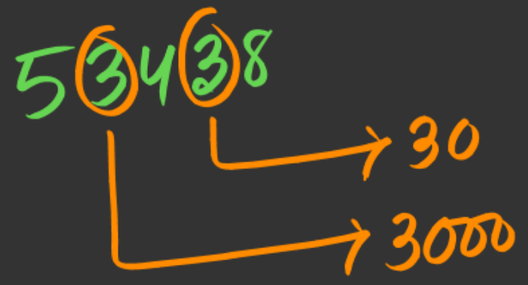
$\frac{1}{8}$

$\frac{1}{8} = 0.125$ → 0.005
→ 0.1



0.100
0.005
—
0.095

0.095 ≠ 53438 ?

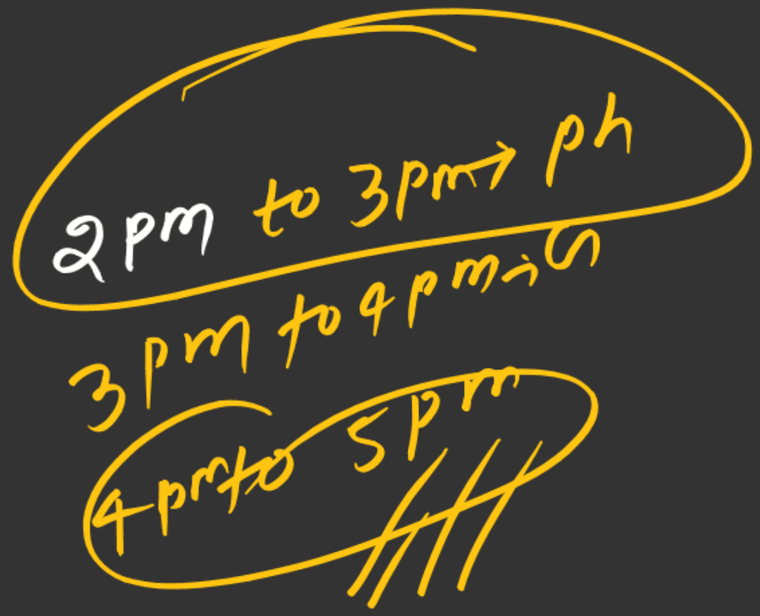


3000 - 30 = 2970

Q:// 7 8 5 4 3 2 ₹

5000 - 5

4995


2pm to 3pm → ph
3pm to 4pm →
4pm to 5pm