36. Simplify $4.\overline{36}-3.\overline{05}+2.\overline{33}$ –

$4.\overline{36}-3.\overline{05}+2.\overline{33}$ को सरल करें–

(A) 2.60

(B) 3.64

(C) $2.\overline{64}$

(D) $3.\overline{64}$

37. Find the value of $8.3\bar{1}+0.\bar{6}+0.00\bar{2}$ –

$8.3\bar{1}+0.\bar{6}+0.00\bar{2}$ का मान निकालें–

(A) $8.9\overline{12}$

(B) $8.91\overline{2}$

(C) $8.97\bar{9}$

(D) $8.9\overline{79}$

	Lcm	**
8 . **	*	
8 . 3 1	1	1 1
0 . 6 6	6	6 6
0 . 0 0	2	2 2
8 . 9 7	9	9 9

$8.97\bar{9}$

38. Simplify $0.28\overline{943}+0.24\overline{689}+2.7\overline{856}$ –

$0.28\overline{943}+0.24\overline{689}+2.7\overline{856}$ को सरल करें–

$3.322\overline{024115}$

(A) $3.\overline{322024}$

(B) $2.\overline{322024}$

(C) $3.\overline{232024}$

(D) $5.\overline{322024}$

LCM

•	*	*	*		*	*	*	*	*	*		*	*
0	·	2	8	9	4	3	9	4	3	9	4	3	.....
0	·	2	4	6	8	9	8	9	8	9	8	9	.....
2	·	7	8	5	6	8	5	6	8	5	6	8	.....
3	·	3	2	2	0	2	4	1	1	5	0	0	

$3.322\overline{024115}$

$\bar{2}.49$

मनटीसा (अराब)

$-2+0.49$

+1 -5

$\bar{2}.47 \rightarrow -2+0.47$

$+\bar{3}.85 \rightarrow -3+0.85$

$-4+0.32$

$\bar{4}.32$

$\overline{2}.49$

मनटीशा (धराव)

$-2+0.49$

$+1-5=-4$

$$\begin{array}{r} \overline{2}.47 \\ +\overline{3}.85 \\ \hline \overline{4}.32 \end{array}$$

$+1-22=-21$

$$\begin{array}{r} \overline{5}.37 \\ +\overline{8}.49 \\ +\overline{9}.68 \\ \hline \overline{21}.54 \end{array}$$

39. Simplify $\bar{8}.72 + \bar{9}.46 + \bar{3}.25$ –

$\bar{8}.72 + \bar{9}.46 + \bar{3}.25$ को सरल करें–

(A) $\bar{19}.43$

(B) $\bar{21}.45$

(C) $\bar{17}.47$

(D) $\bar{18}.43$

$\bar{8}.72$ $+1-20$
$=-19$

$\bar{9}.46$

$\bar{3}.25$

$\bar{19}.43$

40. $\left(3^{25}+3^{26}+3^{27}+3^{28}\right)$ is exactly divisible by which of the following?

$\left(3^{25}+3^{26}+3^{27}+3^{28}\right)$ निम्न में से किससे पुर्णतया विभक्त होगा?

$3^{25}\left[3^0+3^1+3^2+3^3\right]$

$1+3+9+27$

$x^0=1$

$x\neq 0$

$0^0 \rightarrow$ undifine

(A) 11

(B) 16 $\rightarrow 2^4$ X

(C) 25 $\rightarrow 5^2$

(D) 30

$3^1\times 2^1\times 5^1$

$3^{25}\times 40 \Rightarrow 3^{25}\times 2^3\times 5^1$

$40=8\times 5$

$=2^3\times 5^1$

41. $\left(4^{61}+4^{62}+4^{63}+4^{64}\right)$ is exactly divisible by which of the following?

$\left(4^{61}+4^{62}+4^{63}+4^{64}\right)$ निम्न में से किससे विभक्त होगा?

(A) 13

(B) 11

(C) 31

(D) 17

$1+4 \quad 16+64$

$4^{61}\left[4^{0}+4^{1}+4^{2}+4^{3}\right]$

$4^{61} \times 85$

$4^{61} \times 85$

42. Find the value of

$$\left(1-\frac{1}{2}\right)\left(1-\frac{1}{3}\right)\left(1-\frac{1}{4}\right)\left(1-\frac{1}{5}\right).....\left(1-\frac{1}{100}\right) =$$

$$\left(1-\frac{1}{2}\right)\left(1-\frac{1}{3}\right)\left(1-\frac{1}{4}\right)\left(1-\frac{1}{5}\right).....\left(1-\frac{1}{100}\right)$$ का मान ज्ञात करें-

$\frac{1}{2} \times \frac{2}{3} \times \frac{3}{4} \times \frac{4}{5} \times \cdots\cdots\cdots \times \frac{99}{100}$

(A) $\frac{1}{50}$

(B) $\frac{99}{100}$

$\frac{1}{100}$

(C) $\frac{100}{1}$

(D) $\frac{1}{100}$

43. Find the value of

$$\left(1+\frac{1}{2}\right)\left(1+\frac{1}{3}\right)\left(1+\frac{1}{4}\right)\left(1+\frac{1}{5}\right).....\left(1+\frac{1}{100}\right).$$

$$\left(1+\frac{1}{2}\right)\left(1+\frac{1}{3}\right)\left(1+\frac{1}{4}\right)\left(1+\frac{1}{5}\right).....\left(1+\frac{1}{100}\right)$$ का मान ज्ञात करें।

$\frac{3}{2}\times\frac{4}{3}\times\frac{5}{4}\times\frac{6}{5}\times\cdots\times\frac{101}{100}$

$\frac{3}{2}\times\frac{4}{3}\times\frac{5}{4}\times\frac{6}{5}\times\cdots\times\frac{101}{100}$

$\frac{101}{2}$

(A) $\frac{1}{101}$

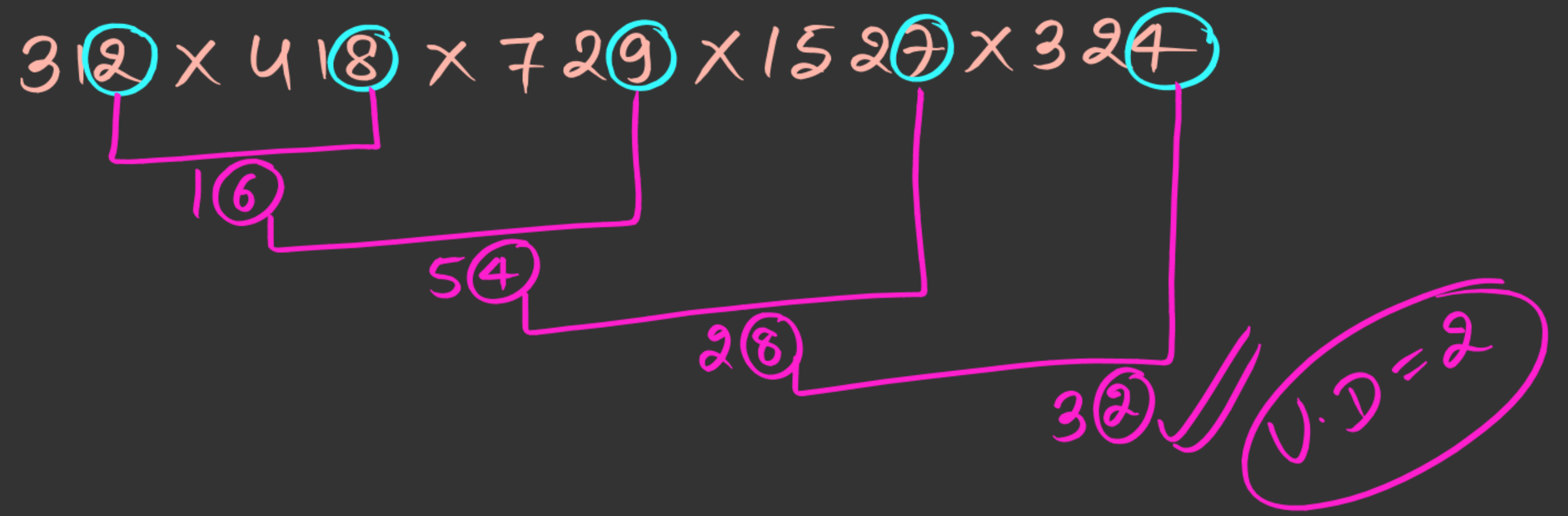
(B) $\frac{101}{100}$

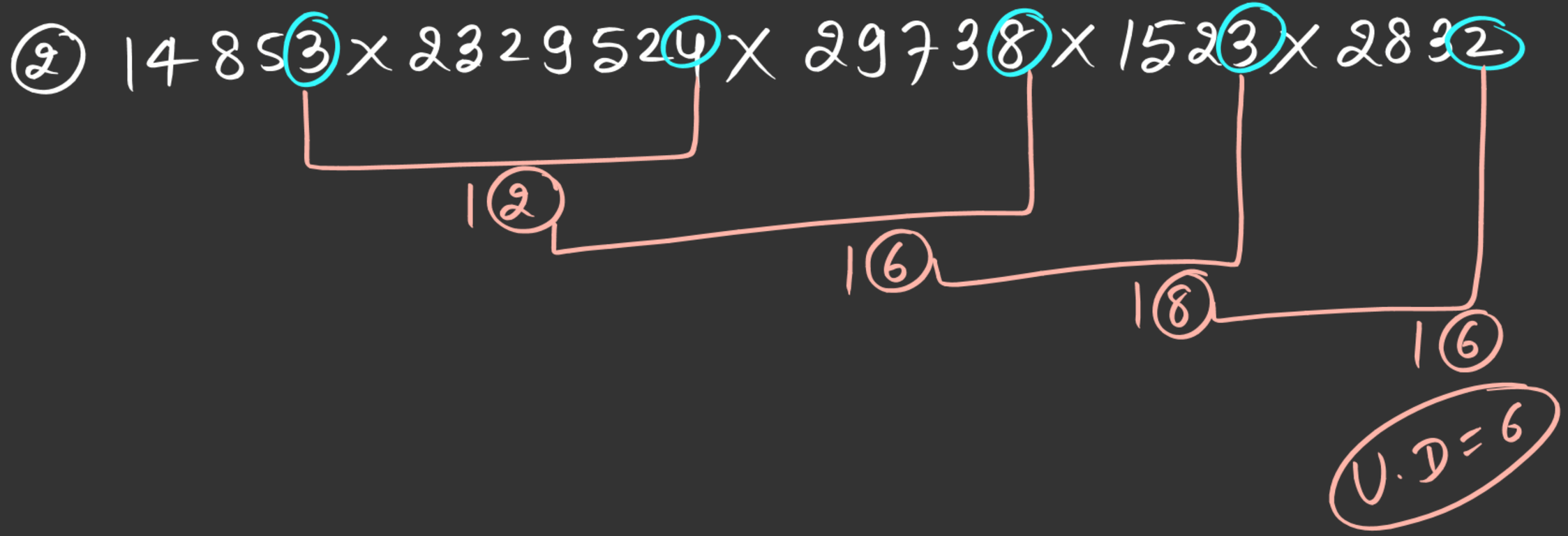
(C) $\frac{101}{3}$

(D) $\frac{101}{2}$

Unit digit (इकाई अंक)

(1) $312 \times 418 \times 729 \times 1527 \times 324$




(2) 1485(3) × 232952(4) × 29738(8) × 1523(3) × 2832
12
16
18
16
U.D = 6

③ $129 \times 1153 \times 58729 \times 48751 \times 2933 \times 251 \times 25$

→ U·D = 5

विषम सं॰ U·D

(i) $5 \times$ odd no. $\longrightarrow 5$

(ii) $5 \times$ Even no. $\longrightarrow 0$

सम सं॰

④ $1727 \times 2831 \times 33755 \times 4829 \times 371 \times 727 \times 329 \times 328$

U·D = 0

① $71 \times 72 \times 73 \times \cdots \times 89 = 0$ (V.D)

② $31 \times 33 \times 35 \times 37 \times \cdots \times 97 = 5$

③ $2 \times 3 \times 5 \times 7 \times 11 \times 13 \times \cdots \times 89 = 0$

④ $3 \times 5 \times 7 \times 11 \times 13 \times \cdots \times 101 = 5$

5 × विषम = 5

5 × सम = 0

2 · 3 × 5 · 6 ⑧

$(1,0,5,6)^n$ unit digit $\longrightarrow$ no change

$(\ldots\ldots 1)^n \longrightarrow$ U.D 1

$(\ldots\ldots 0)^n \longrightarrow 0$

$(\ldots\ldots 5)^n \longrightarrow 5$

$(\ldots\ldots 6)^n \longrightarrow 6$

① $(2305)^{1929} + (2326)^{1928} + (720)^{28} + (231)^{29}$

$5 + 6 + 0 + 1 = 1②$

23
3

U.D = 2

② $(231)^{129} - (726)^{28} \rightarrow -5 \Rightarrow 10 - 5 = 5$ Ans

$\quad 1 - 6$

③ $(21)^{29} - (15)^{17} \rightarrow -4 \Rightarrow 10 - 4 = 6$ Ans

$\quad 1 - 5$