



airGurukul

UPP CONSTABLE 2026



बदो 2.0

MATHS

UNIT DIGIT

(इंकाई का अंक)



26 JUNE 2026

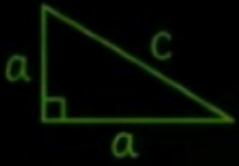


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AADIL SIR

$$x+y$$



$$a^2+b^2=c^2$$

$$x^2-y^2=(x+y)(x-y)$$

$$\sqrt{x}$$

$$\pi$$

$$x^2-y^2=(x^2+y)$$

$$x^2+y^2=2(x+y)$$

$$x^2-y^2=(x+y)$$

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- ① Classification of Numbers ✖ ✖
संख्याओं की वर्गीकरण
- ② Unit digit (इकाई अंक) → ✖ ✖

Number of Trailing Zeroes

शून्यों की संख्या

$$15 \times 12 \times 18 \times 20 \times 24$$

Handwritten prime factorization of the product:

$$(3 \times 5) \times (3 \times 2^2) \times (2 \times 3^2) \times (2^2 \times 5) \times (2^3 \times 3)$$

Handwritten analysis of prime factors:

5 → 2 बार (2 times)
 2 → 8 बार (8 times)

1. $15 \times 12 \times 18 \times 20 \times 24$ में दायीं ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros from the right in

$$15 \times 12 \times 18 \times 20 \times 24.$$

a) 2

b) 4

c) 5

4) 8

Handwritten calculations for the number of zeros:

$$10 = 5 \times 2$$

$$100 = 25 \times 4$$

From the prime factorization, there are 2 pairs of (5, 2) highlighted in yellow boxes, indicating 2 trailing zeros.

$$\begin{array}{r|l} 5 & 100 \\ \hline 5 & 20 \\ & 4 \end{array}$$

51
29
→ 24 बार
→ 97 बार

$$\begin{array}{r|l} 2 & 100 \\ \hline 2 & 50 \\ 2 & 25 \\ 2 & 12 \\ 2 & 6 \\ & 3 \end{array}$$

24

2. $1 \times 2 \times 3 \times 4 \times 5 \times 6 \times \underline{\hspace{2cm}} \times 98 \times 99 \times 100$
में दायीं ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros at the end of the product $1 \times 2 \times 3 \times 4 \times 5 \times 6 \times \underline{\hspace{2cm}} \times 98 \times 99 \times 100$.

- a) 20
b) 24
c) 38
d) 30

Trick → 5

$$\begin{array}{r|l} 5 & 100 \\ \hline 5 & 20 \\ & 4 \end{array} \quad 24$$

3. $1 \times 2 \times 3 \times 4 \times \underline{\hspace{2cm}} \times 200$ में दायीं ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros at the end of the product $1 \times 2 \times 3 \times 4 \times \underline{\hspace{2cm}} \times 200$.

a) 48

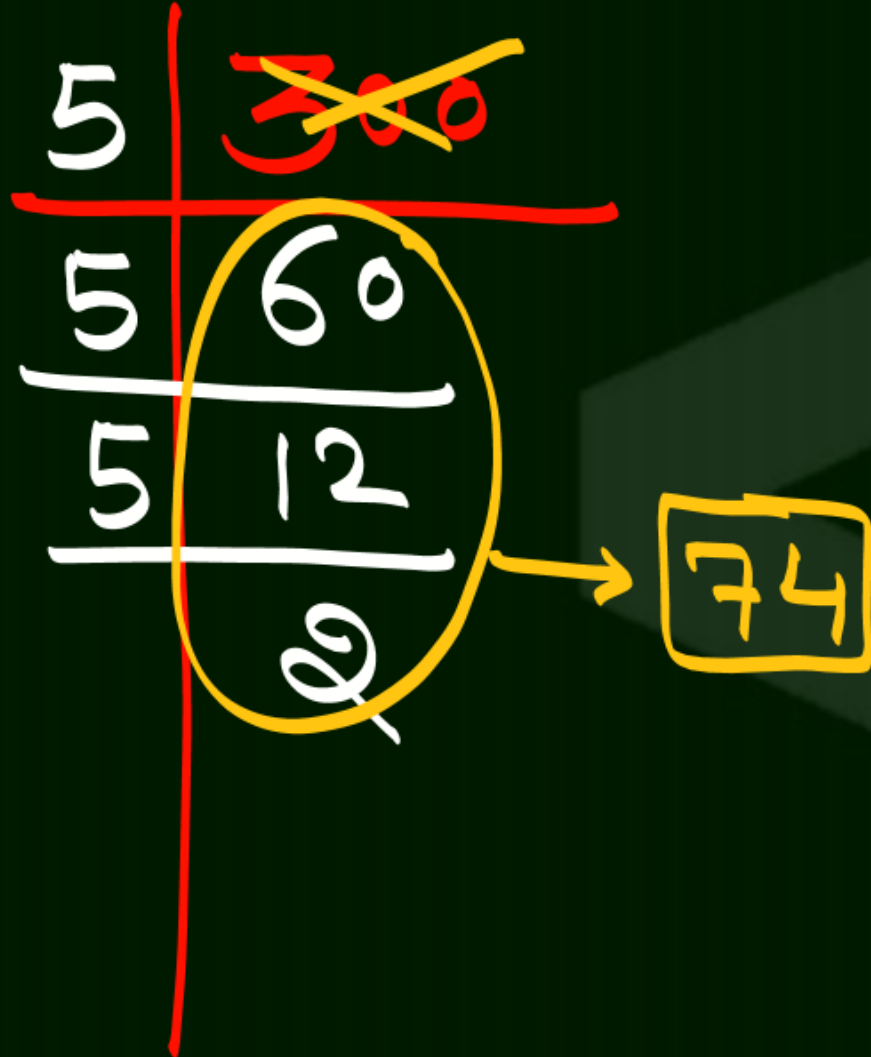
☒ b) 49

c) 50

d) 51

5	200
5	40
5	8
5	1

49



4. $1 \times 2 \times 3 \times 4 \times 5 \times \underline{\hspace{2cm}} \times 300$ में दायीं ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros at the end of the product $1 \times 2 \times 3 \times 4 \times 5 \times \underline{\hspace{2cm}} \times 300$.

a) 72

~~b) 74~~

c) 80

d) 90

5	1000
5	200
5	40
5	8
	1

→ 249

5. $1 \times 2 \times 3 \times 4 \times 5 \times \underline{\hspace{2cm}} \times 998 \times 999 \times 1000$ में दायीं ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros at the end of the product $1 \times 2 \times 3 \times 4 \times 5 \times \underline{\hspace{2cm}} \times 998 \times 999 \times 1000$.

- a) 249
b) 248
c) 250
d) 200

6. $1 \times 2 \times 3 \times 4 \times 5 \times \underline{\hspace{2cm}} \times 9999 \times 10000$ में दायीं ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros at the end of the product

$1 \times 2 \times 3 \times 4 \times 5 \times \underline{\hspace{2cm}} \times 9999 \times 10000$.

- a) 2500
- b) 2499
- c) 2400
- d) 2699

2499

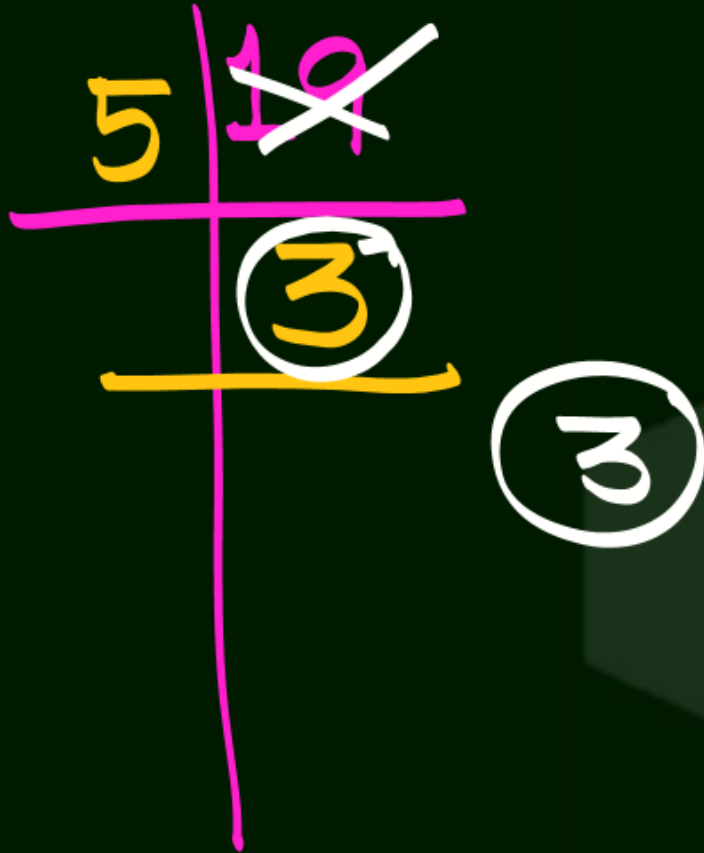
5	10000
5	2000
5	400
5	80
5	16
5	3

7. $1 \times 2 \times 3 \times 4 \times \underline{\hspace{2cm}} \times 19$ में दायीं ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros at the end of the product

$$1 \times 2 \times 3 \times 4 \times \underline{\hspace{2cm}} \times 19$$

- a) 3
- b) 4
- c) 5
- d) 6

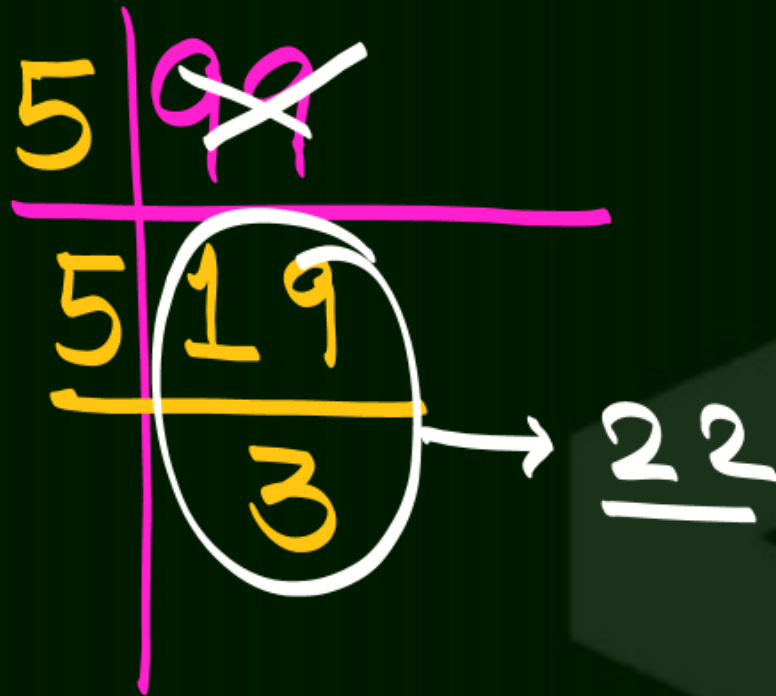


8. $1 \times 2 \times 3 \times 4 \times \underline{\hspace{2cm}} \times 99$ में दायीं ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros at the end of the product

$1 \times 2 \times 3 \times 4 \times \underline{\hspace{2cm}} \times 99$.

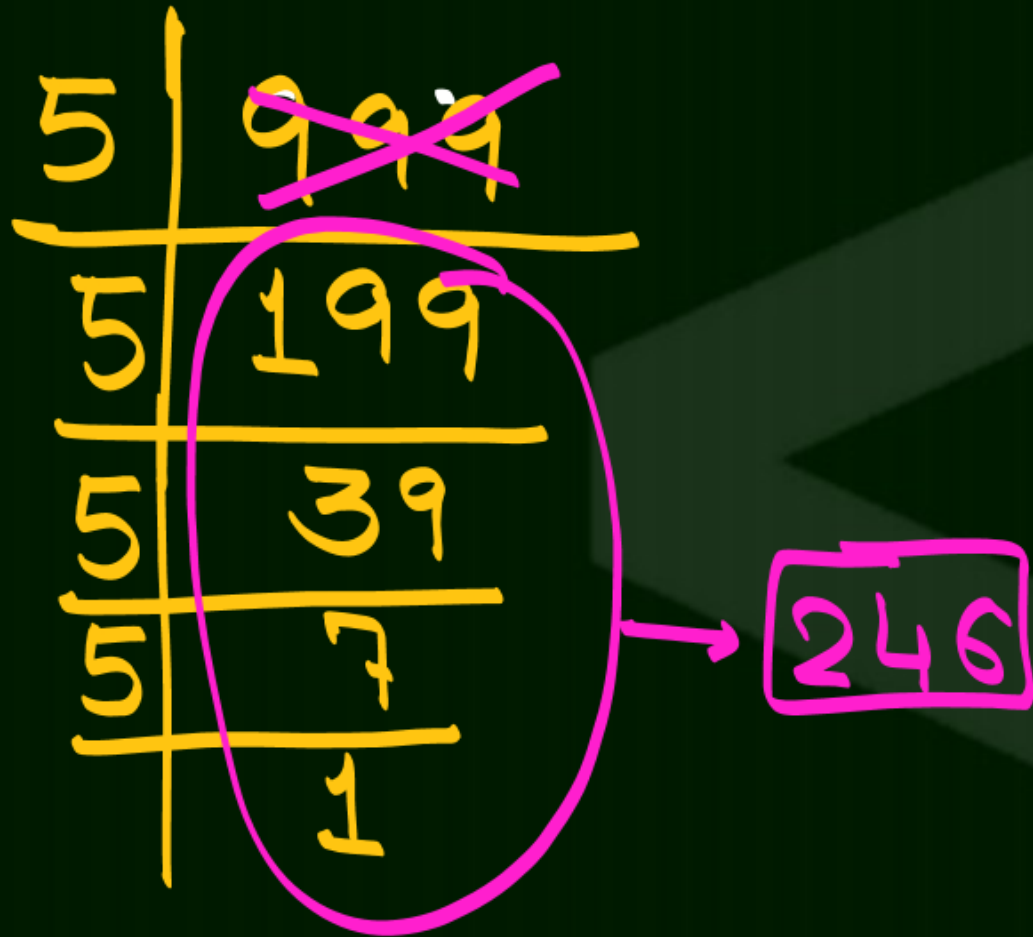
- a) 21
- b) 22
- c) 24
- d) 25



9. $1 \times 2 \times 3 \times 4 \times \underline{\hspace{2cm}} \times 999$ में दायीं ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros at the end of the product $1 \times 2 \times 3 \times 4 \times \underline{\hspace{2cm}} \times 999$.

- a) 246
- b) 248
- c) 250
- d) 240



5	999
5	199
5	39
5	7
5	1

→ 246

$$12 - 4 = \boxed{8}$$

10. $21 \times 22 \times 23 \times 24 \times \underline{\hspace{1cm}} \times 50$ में दायीं ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros at the end of the product

$$\underline{21} \times \underline{22} \times \underline{23} \times \underline{24} \times \underline{\hspace{1cm}} \times \underline{50}.$$

a) 12

b) 10

~~c) 8~~

d) 6

$$(1 \times 2 \times 3 \times 4 \times \dots \times 50) - (1 \times 2 \times 3 \times \dots \times 20)$$

$$\begin{array}{r} 5 \\ 5 \overline{) 25} \\ \underline{10} \\ 15 \end{array}$$

12

$$\begin{array}{r} 5 \\ 5 \overline{) 25} \\ \underline{10} \\ 15 \end{array}$$

4

11. $51 \times 52 \times 53 \times 54 \times \underline{\hspace{2cm}} \times 100$ में दायीं ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros at the end of the product $51 \times 52 \times 53 \times 54 \times \underline{\hspace{2cm}} \times 100$.

- a) 10
- b) 11
- ☒ c) 12
- d) 14

$$(1-100) - (1-50)$$

↓ ↓

$$24 - 12 = \boxed{12}$$

$$\begin{array}{r|l} 5 & 100 \\ \hline 5 & 20 \\ \hline & 4 \end{array}$$

~~$$\begin{array}{r|l} 5 & 100 \\ \hline 5 & 20 \\ \hline & 4 \end{array}$$~~

Type. 2

सम/विषम संख्यायें Even/Odd Numbers

विषम संख्यायें
Odd Numbers

जो संख्याएँ 2 से पूर्णतः विभाजित न हो।

1, 3, 5, 7, 9

2 3 5

12. $1 \times 3 \times 5 \times 7 \times 9 \times \underline{\hspace{2cm}} \times 99$ में दायीं ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros at the end of the product

$1 \times 3 \times 5 \times 7 \times 9 \times \underline{\hspace{2cm}} \times 99$.

2x
5-

Pair नहीं
Zero नहीं

- a) 0
- b) 1
- c) 2
- d) 20

सम संख्याये Even Numbers

जो संख्याये 2 से पूर्णतः विभाजित होती है।

Last digit $\rightarrow 0, 2, 4, 6, 8$

Ex $\rightarrow 2437\underline{8}$

13. $2 \times 4 \times 6 \times 8 \times \underline{\hspace{2cm}} \times 100$ में दायीं ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros at the end of the product

$2 \times 4 \times 6 \times 8 \times \underline{\hspace{2cm}} \times 100$.

- a) 24
- b) 12
- c) 10
- d) 20

$$2 \times 4 \times 6 \times 8 \times \dots \times 100$$

$$\begin{matrix} \wedge & \wedge & \wedge & \wedge \\ 2 \times 1 & 2 \times 2 & 2 \times 3 & 2 \times 4 \end{matrix}$$

$$2^{50} (1 \times 2 \times 3 \times 4 \times \dots \times 50)$$

$$\begin{array}{r} 5 \\ 5 \overline{) 50} \\ \underline{25} \end{array}$$

$$5 = 12 \text{ Ans}$$

$$\begin{array}{r} 5 \\ 5 \overline{) 50} \\ \underline{25} \end{array} \rightarrow 12$$

14. $2 \times 4 \times 6 \times 8 \times \underline{\hspace{2cm}} \times 200$ में दायाँ ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros at the end of the product

$2 \times 4 \times 6 \times 8 \times \underline{\hspace{2cm}} \times 200$

~~a) 24~~

b) 25

c) 12

d) 50

5	100
5	20
	4

~~200~~ 100

15. $2 \times 4 \times 6 \times 8 \times \underline{\hspace{2cm}} \times 1000$ में दायीं ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros at the end of the product

$2 \times 4 \times 6 \times 8 \times \underline{\hspace{2cm}} \times 1000$.

- a) 124
- b) 125
- c) 249
- d) 250

5	500
5	100
5	20
	4

124

500

16. $30 \times 32 \times 34 \times 36 \times \underline{\hspace{2cm}} \times 100$ में दायीं ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros at the end of the product

$30 \times 32 \times 34 \times 36 \times \underline{\hspace{2cm}} \times 100$.

- 28**
- a) 12
 - b) 2
 - c) 10
 - d) 15

$$\begin{array}{r} 5 \cancel{14} \\ \hline 20 \end{array}$$

$$(2 \times 4 \times 6 \times 8 \times \dots \times 100) - (2 \times 4 \times 6 \times \dots \times 20)$$

14

12

$$\begin{array}{r} 5 \cancel{50} \\ \hline 5 \cancel{10} \\ \hline 2 \end{array}$$

10 Ans

17. $102 \times 104 \times 106 \times 108 \times \underline{\hspace{2cm}} \times 400$ में दायीं ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros at the end of the product $102 \times 104 \times 106 \times 108 \times \underline{\hspace{2cm}} \times 400$.

- a) 49
- b) 12
- c) 39
- d) 0

$$(2 - \frac{400}{2}) - (2 - \frac{100}{2})$$

49 - 12 = 37

37

$$\begin{array}{r} 51 \\ 51 \overline{) 2550} \\ \underline{51} \\ 51 \\ \underline{51} \\ 0 \end{array}$$

$$\begin{array}{r} 51 \\ 51 \overline{) 2550} \\ \underline{51} \\ 51 \\ \underline{51} \\ 0 \end{array}$$

18. $3 \times 6 \times 9 \times 12 \times \underline{\hspace{2cm}} \times 300$ में दायीं ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros at the end of the product

$3 \times 6 \times 9 \times 12 \times \underline{\hspace{2cm}} \times 300.$

- a) 24
- b) 25
- c) 26
- d) 30

$3 \times 6 \times 9 \times 12 \dots \times 300$

$\begin{matrix} \wedge & \wedge & \wedge & \wedge \\ 3 \times 1 & 3 \times 2 & 3 \times 3 & 3 \times 4 \end{matrix}$

~~3×100~~ $(1 \times 2 \times 3 \times 4 \times \dots \times 100)$

$\boxed{24}$

$\frac{100}{3}$

$\begin{array}{r} 5 \overline{) 100} \\ \underline{50} \\ 50 \\ \underline{50} \\ 0 \end{array}$

$\boxed{24}$

$\begin{array}{r} 5 \overline{) 100} \\ \underline{50} \\ 50 \\ \underline{50} \\ 0 \end{array}$

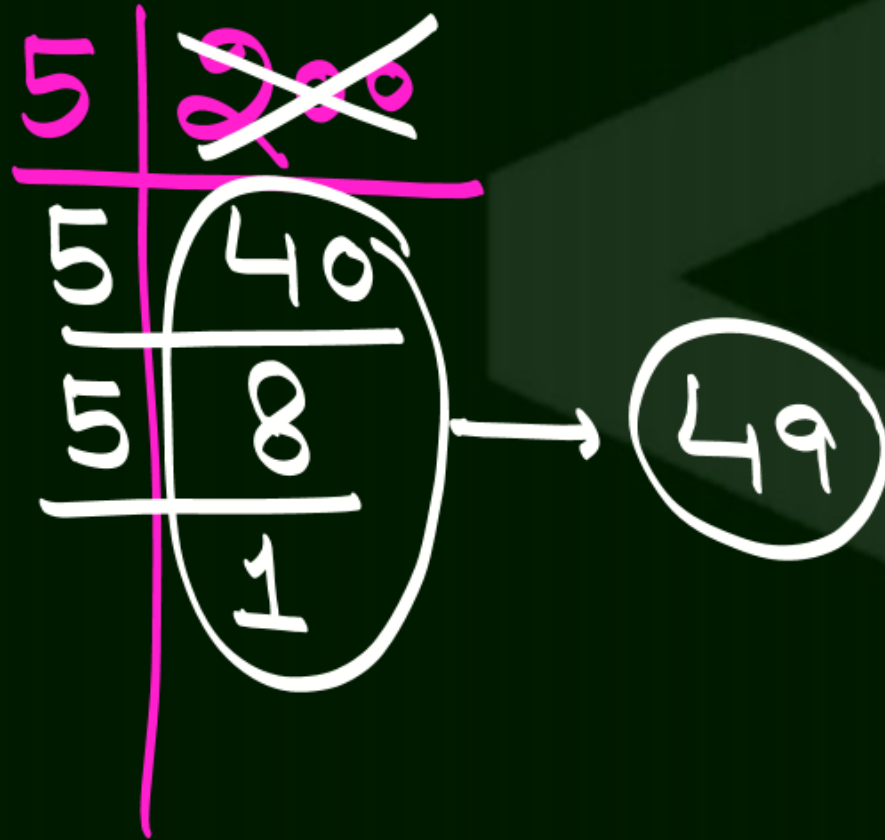
19. $4 \times 8 \times 12 \times 16 \times \underline{\hspace{2cm}} \times 800$ में दायीं ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros at the end of the product

$4 \times 8 \times 12 \times 16 \times \underline{\hspace{2cm}} \times \underline{800}$.

- a) 49
- b) 50
- c) 24
- d) 65

~~4~~ **200**



20. $6 \times 12 \times 18 \times 24 \times \underline{\hspace{2cm}} \times 1800$ में दायाँ ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros at the end of the product

$6 \times 12 \times 18 \times 24 \times \underline{\hspace{2cm}} \times 1800$.

- a) 74
- b) 99
- c) 48
- d) 98

$$\begin{array}{r} 5 \overline{) 300} \\ 5 \overline{) 60} \\ 5 \overline{) 12} \\ 2 \end{array}$$

74

300

$$\begin{array}{r} 5 \overline{) 12} \\ 10 \\ 2 \end{array} \textcircled{2}$$

21. $9 \times 18 \times 27 \times 36 \times \underline{\hspace{2cm}} \times 5400$ में दायीं ओर से शून्यों की संख्या ज्ञात करें।

Find the number of zeros at the end of the product

$9 \times 18 \times 27 \times 36 \times \underline{\hspace{2cm}} \times 5400$

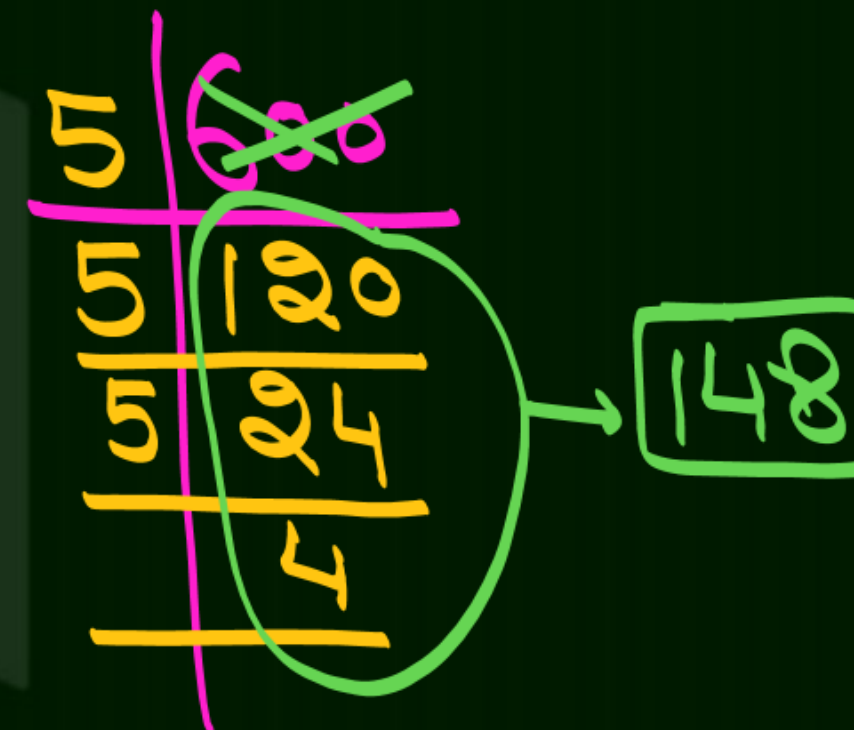
a) 148

b) 248

c) 150

d) 250

600



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