

21. M and N are such integers that $0 \leq N \leq 9$ and $\frac{M}{810} = 0.\overline{9N5}$ then the value of $M + N$ is equal to?

M और N ऐसे पूर्णांक हैं जो $0 \leq N \leq 9$ और $\frac{M}{810} = 0.\overline{9N5}$ हैं तो $M + N$ का मान बराबर है?

[A] 752

[B] 789

[C] 853

[D] 527

750 + 2

$$\begin{array}{r} 999 \checkmark \\ - 74 \checkmark \\ \hline 925 \end{array}$$

$$\frac{M}{810} = \frac{9N5}{999}$$

~~30~~ ~~37~~

N = 2

$$M = 30 \times \frac{925}{37}$$

$$M = 750$$

$$\begin{array}{l} 37 \times 27 = 999 \\ 37 \times 25 = 925 \end{array}$$

$$37 \times 37 = 111 \times 9$$

$$37 \times 27 = 999$$



22. **Simplifying the following/निम्नलिखित को सरल कीजिए**

$$0.\overline{077} + \cdot\overline{7} \text{ } ^{\times} \overline{33}$$

RRB NTPC 2021

[A] $\frac{7}{66}$

[C] $\frac{7}{666}$

[B] $\frac{7}{333}$

[D] $\frac{7}{33}$

$$\frac{77}{999} + \frac{\cancel{776}}{\cancel{996}}$$

$$\frac{77}{999} + \frac{11}{15} \checkmark$$

23. What is the value of $8.\overline{74} + 6.\overline{47}$?

$8.\overline{74} + 6.\overline{47}$ का मान क्या है?

[A] $15\frac{2}{9}$

[B] $14\frac{7}{9}$

[C] $16\frac{1}{9}$

[D] $15\frac{1}{3}$

$8 + \overset{\times}{\overline{74}} + 6 + \overset{\times}{\overline{47}}$

$14 + \frac{67}{90} + \frac{43}{90}$

$= 14 + \frac{110}{90} = 14 + 1\frac{2}{9} = 15\frac{2}{9}$

24. The value of $2.5555\ldots + 1.6363\ldots - 1.1111\ldots$ is:

2.5555..... + 1.6363..... - 1.1111..... का मान है:

RRB PARAMEDICAL 2025

[A] $\frac{311}{108}$

[C] $\frac{310}{100}$

[B] $\frac{300}{107}$

[D] $\frac{305}{99}$

$$\frac{2}{1} + \frac{5}{9} + \frac{63}{99} - \frac{1}{9}$$
$$= \frac{198 + 55 + 63 - 11}{99} = \frac{305}{99}$$


$$2.67 = 2 + .67$$

$$3\frac{4}{7} = 3 + \frac{4}{7}$$

$$5.4141\ldots = 5 + \overline{.41}$$



25. *Express the following into vulgar fraction:*
निम्नलिखित को अशुद्ध भिन्न में व्यक्त करें:

$$0.\overset{\times}{6}\overline{41} + 0.\overline{23}$$

(RRB RPF SI 2024)

[A] $173/198$

[C] $173/199$

[B] $173/999$

[D] $173/99$

$$\begin{aligned} & \frac{635}{990} + \frac{230}{990} \\ &= \frac{865}{990} = \frac{173}{198} \end{aligned}$$

26. Find the value of $2.3\overline{8} \div 0.5\overline{4}$.

$2.3\overline{8} \div 0.5\overline{4}$ का मान ज्ञात कीजिए:

[RRB JE 2024]

[A] $4\frac{19}{49}$

[C] $5\frac{26}{51}$

[B] $3\frac{17}{21}$

[D] $6\frac{29}{57}$

$$\begin{array}{r} 215 \\ \cancel{90} \\ \hline 49 \\ \cancel{90} \\ \hline \end{array}$$
$$= \frac{215}{49} = 4\frac{19}{49}$$

27. **Simplify:** $2.\overline{34} - 1.\overline{89}$

$2.\overline{34} - 1.\overline{89}$ को सरल कीजिए।

RRB NTPC 12TH LEVEL CBT-1 2025

[A] $\frac{47}{88}$

[C] $\frac{9}{20}$

[B] $\frac{4}{95}$

[D] $\frac{5}{9}$

~~$1 + \frac{34}{99} - \frac{29}{99}$~~
 ~~$= 1 - \frac{5}{99} = \frac{94}{99}$~~

28. Express the following as a vulgar fraction:
निम्नलिखित को अशुद्ध भिन्न के रूप में व्यक्त करें:

$$0.\overset{\times}{4}\overline{2} + 0.\overline{42}.$$

(RRB RPF SI 2024)

☒ [A] $\frac{838}{990}$

[C] $\frac{834}{990}$

[B] $\frac{838}{999}$

[D] $\frac{834}{999}$

$$\frac{38}{90} + \frac{42}{99}$$

$$= \frac{418 + 420}{990}$$

29. Express the following as a vulgar fraction: $0.\overline{123} + 0.\overline{012} + 3$
निम्नलिखित को सामान्य भिन्न के रूप में व्यक्त करें: $0.\overline{123} + 0.\overline{012} + 3$

RRB RPF SI 2024

[A] $3\frac{134}{999}$

[C] $3\frac{135}{990}$

[B] $3\frac{135}{999}$

☒ [D] $3\frac{134}{990}$

$$\frac{122}{990} + \frac{12}{990} + 3$$

$$\begin{aligned} 0.\overline{123} &= \frac{123-1}{990} \\ &= \frac{122}{990} \end{aligned}$$

$$= 3 + \frac{134}{990}$$

30. Find the value of $0.\overset{\times}{3}\overline{6} + 0.\overset{\times}{7}\overline{23}$.

निम्नांकित का मान ज्ञात कीजिए:

RRB JE 2024

[A] $1\frac{41}{495}$

[C] $1\frac{26}{33}$

[B] $1\frac{89}{990}$

[D] $1\frac{31}{330}$

$$\begin{aligned} & \frac{33}{90} + \frac{716}{990} \\ &= \frac{363 + 716}{990} = \frac{1079}{990} = 1 + \frac{89}{990} \end{aligned}$$

31. Let $0.\overline{27} \div 3.\overline{2} = x$, where x is a proper fraction in its simplest form. Then what will be the sum of numerator and denominator of x ?

मान लीजिए $0.\overline{27} \div 3.\overline{2} = x$, जहाँ x अपने सरलतम रूप में एक उचित भिन्न है। तो x के अंश और हर का योग क्या होगा?

RRB GROUP-D 2022

[A] 346

[B] 296

[C] 340

[D] 342

$$\frac{0.\overline{27}}{3.\overline{2}} = \frac{\frac{27}{99}}{\frac{29}{9}} = \frac{27}{99} \times \frac{9}{29} = \frac{27}{319} \Rightarrow \frac{27}{319}$$

$$27 + 319 = 346$$

32. Simplify $1.\overline{45} + 0.3\overline{12} - 1.1\overline{12}$.
 सरल कीजिए $1.\overline{45} + 0.3\overline{12} - 1.1\overline{12}$.

RRB NTPC 2021

[A] $\frac{13}{20}$
~~[C]~~ $\frac{589}{900}$

[B] $\frac{374}{495}$
 [D] $\frac{163}{300}$

$$= \frac{7590 - 1111}{9900}$$

$$= \frac{\cancel{6479}}{\cancel{9900}} = \frac{589}{900}$$

$$\frac{450}{990} + \frac{309}{990} - \frac{101}{900}$$

$$\frac{759}{990} - \frac{101}{900}$$

33. The value of $0.4\overline{7} + 0.5\overline{03} - 0.3\overline{9} \times 0.\overline{8}$ is:

$0.4\overline{7} + 0.5\overline{03} - 0.3\overline{9} \times 0.\overline{8}$ का मान क्या है।

[A] $0.6\overline{15}$ ✗

[B] $0.6\overline{15}$ ✗

✓ [C] $0.6\overline{25}$

[D] $0.6\overline{25}$

$$\begin{aligned} 0.3\overline{9} \times 0.\overline{8} \\ \frac{36}{90} \times \frac{8}{9} \\ = \frac{32}{90} \end{aligned}$$

$$\frac{43}{90} + \frac{498}{990} - \frac{32}{90}$$

$$= \frac{498}{990} + \frac{11}{90}$$

$$= \frac{498 + 121}{990} = \frac{619}{990}$$

$$0.\overline{625} = \frac{625 - 6}{990}$$



वर्ग / वर्गशुल / वर्गशुल



SQUARE	VALUE	SQUARE	VALUE	SQUARE	VALUE	SQUARE	VALUE	SQUARE	VALUE
1^2	1	11^2	121	21^2	441	31^2	961	41^2	1681
2^2	4	12^2	144	22^2	484	32^2	1024	42^2	1764
3^2	9	13^2	169	23^2	529	33^2	1089	43^2	1849
4^2	16	14^2	196	24^2	576	34^2	1156	44^2	1936
5^2	25	15^2	225	25^2	625	35^2	1225	45^2	2025
6^2	36	16^2	256	26^2	676	36^2	1296	46^2	2116
7^2	49	17^2	289	27^2	729	37^2	1369	47^2	2209
8^2	64	18^2	324	28^2	784	38^2	1444	48^2	2304
9^2	81	19^2	361	29^2	841	39^2	1521	49^2	2401
10^2	100	20^2	400	30^2	900	40^2	1600	50^2	2500



Cube	Cube Value	Cube	Cube Value	Cube	Cube Value
1³	1	11³	1331	21³	9261
2³	8	12³	1728	22³	10648
3³	27	13³	2197	23³	12167
4³	64	14³	2744	24³	13824
5³	125	15³	3375	25³	15625
6³	216	16³	4096	26³	17576
7³	343	17³	4913	27³	19683
8³	512	18³	5832	28³	21952
9³	729	19³	6859	29³	24389
10³	1000	20³	8000	30³	27000

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