Decimal & Fraction

1. Convert $0.\bar{6}$ into fractions. $0.\bar{6}$ को भिन्न में बदलें :-

(a) $\frac{6}{3}$

(b) $\frac{2}{3}$

(c) $\frac{2}{6}$

(d) $\frac{4}{3}$

Solve :- $\frac{6}{9} \Rightarrow \frac{2}{3}$

2. The number $0.12\overline{464}$ in the form $\frac{p}{q}$ is equal to :
$\frac{p}{q}$ के रूप में संख्या $0.12\overline{464}$ बराबर है :-

RRB NTPC 24.02.2021 (SHIFT-II)

(a) $\frac{117}{1950}$

(b) $\frac{17}{950}$

(c) $\frac{67}{4999}$

(d) $\frac{617}{4950}$

Solve :- $0.12\overline{464}$

$\Rightarrow \frac{12464-124}{99000} \Rightarrow \frac{12340}{99000} \Rightarrow \frac{617}{4950}$

3. The value of $3.1\overline{4}$ is . $3.1\overline{4}$ का मान है?

RRB NTPC 29.02.2021 (SHIFT-II)

(a) $3\frac{13}{90}$

(b) $3\frac{12}{90}$

(c) $3\frac{11}{90}$

(d) $3\frac{14}{90}$

Solve :- $3.1\overline{4}$

$3 + 0.1\overline{4} \Rightarrow 3 + \frac{14-1}{90}$

$\Rightarrow 3 + \frac{13}{90} \Rightarrow 3\frac{13}{90}$

4. Express the decimal number $3.12\overline{7}$ in fraction form.
दशमलव संख्या $3.12\overline{7}$ को भिन्न रूप में व्यक्त करें।

RRB NTPC 22.02.2021 (SHIFT-I)

(a) $\frac{281}{900}$

(b) $\frac{563}{180}$

(c) $\frac{180}{563}$

(d) $\frac{365}{180}$

Solve :- $3.12\overline{7}$

$3 + 0.12\overline{7}$

$3 + \frac{127-12}{900} \Rightarrow 3\frac{23}{180}$

$3 + \frac{115}{900}\ \frac{23}{180}$ $\quad 3 + \frac{23}{180}$

$\frac{540+23}{180} \Rightarrow \frac{563}{180}$

Decimal & Fraction

5. $0.5\overline{32}$ is equivalent to the fraction:
$0.5\overline{32}$ ___ किस भिन्न के बराबर है:

RRB NTPC 04.02.2021 (SHIFT-II)

(a) $\frac{572}{990}$

(b) $\boxed{\frac{527}{990}}$

(c) $\frac{537}{990}$

(d) $\frac{32}{99}$

Solve:- $0.5\overline{32}$

$\frac{532-5}{990} \Rightarrow \boxed{\frac{527}{990}}$

Q. $0.\overline{29} + 0.\overline{47} + 0.1\overline{3} \Rightarrow 0.\overline{89}$

$\Rightarrow \frac{29}{99} + \frac{47}{99} + \frac{13}{99} \Rightarrow \frac{189}{99} \Rightarrow 0.\overline{89}$

$\Rightarrow 1.\overline{37} + 4.\overline{25} + 9.\overline{18} = ?$

$\Rightarrow 1 + 0.\overline{37} + 4 + 0.\overline{25} + 9 + 0.\overline{18}$

$\Rightarrow 14 + 0.\overline{80} \Rightarrow 14.\overline{80}$

$0.\overline{80} \Rightarrow 0.80808080\ldots$ — 2
$0.\overline{8} \Rightarrow 0.88888888$ 37, 25, 18, 80

Q. $0.\overline{73} + 0.\overline{45} \Rightarrow 1.\overline{18}$

$\Rightarrow \frac{73}{99} + \frac{45}{99}$

$\Rightarrow \frac{118}{99} \Rightarrow 1 + \frac{19}{99} \Rightarrow 1 + 0.\overline{19} \Rightarrow \boxed{1.\overline{19}}$

$99\overline{)118}(1$, $\frac{99}{19}$

$1\frac{19}{99}$

$1+\frac{19}{99}$

$1.\overline{19}$

6. The value of $0.\overline{56} + 0.\overline{43} + 0.\overline{89}$ is.
$0.\overline{56} + 0.\overline{43} + 0.\overline{89}$ का मान है।

RRB NTPC 23.02.2021 (SHIFT-I).

(a) $1.\overline{98}$

(b) $1.\overline{87}$

(c) $\boxed{1.\overline{89}}$

(d) $1.\overline{88}$

Solve:-

$\frac{1.88}{-\ 99}$

$1.89 \Rightarrow \boxed{1.\overline{89}}$

1 अन्तर (1st Term - Last Term)

Decimal & Fraction

Q. $0.5\overline{7} + 0.\overline{44} + 0.8\overline{3} \Rightarrow ?$

$1.84 \Rightarrow 1.8\overline{4}$

$$\begin{array}{r} 1.84 \\ +1 \\ \hline 1.85 \end{array}$$

7. Evaluate: $0.6\overline{23}$. मूल्यांकन करें: $0.6\overline{23}$.

RRB JE - 31/05/2019 · (SHIFT - II)

(a) $\frac{623}{999}$

(b) $6\frac{23}{999}$

(c) $\frac{617}{990}$

(d) $6\frac{23}{990}$

Solve :- $0.6\overline{23}$

$\Rightarrow \frac{623-6}{990}$

$\Rightarrow \frac{617}{990}$

8. Find the value of $\frac{1}{14} + \frac{1}{4.7} + \frac{1}{7.10} + \ldots + \frac{1}{47.50}$

$\frac{1}{1.4} + \frac{1}{4.7} + \frac{1}{7.10} + \ldots + \frac{1}{47.50}$ का मान ज्ञात करें

RRB NTPC 16.02.2021 (SHIFT - II) Stage 1st

(a) $\frac{49}{50}$

(b) $\frac{47}{150}$

(c) $\frac{47}{50}$

(d) $\frac{49}{150}$

Solve :- $\Rightarrow \frac{1}{\underbrace{1\times4}_{3}} + \frac{1}{\underbrace{4\times7}_{3}} + \frac{1}{\underbrace{7\times10}_{3}} + \ldots + \frac{1}{\underbrace{47\times50}_{3}}$

$\Rightarrow$ अन्तर = Difference = 3

$\Rightarrow \frac{1}{1}\times\frac{1}{4} + \frac{1}{4}\times\frac{1}{7} + \frac{1}{7}\times\frac{1}{10} + \ldots + \frac{1}{47}\times\frac{1}{50}$

$\frac{1}{\text{अन्तर}}$ (1st - Last)

$\Rightarrow \frac{1}{3}\left(\frac{1}{1} - \frac{1}{50}\right) \Rightarrow \frac{1}{3}\left(\frac{50-1}{50}\right) \Rightarrow \frac{49}{150}$

9. The Sum of $\frac{1}{2} + \frac{1}{6} + \frac{1}{12} + \ldots + \frac{1}{n(n+1)}$ is:

$\frac{1}{2} + \frac{1}{6} + \frac{1}{12} + \ldots + \frac{1}{n(n+1)}$ का योग है:

RRB NTPC 02.03.2021 (SHIFT - II) Stage - 1st

(a) $\frac{n+1}{n}$

(b) $\frac{n(n+1)}{2}$

(c) $\frac{n+1}{2n}$

(d) $\frac{n}{n+1}$

Solve :- $\frac{1}{1\times2} + \frac{1}{2\times3} + \frac{1}{3\times4} + \ldots + \frac{1}{n(n+1)}$

$\Rightarrow \frac{1}{1}\times\frac{1}{2} + \frac{1}{2}\times\frac{1}{3} + \frac{1}{3}\times\frac{1}{4} + \ldots + \frac{1}{n} + \frac{1}{n+1}$

$\Rightarrow \frac{1}{\text{अन्तर}}$ (1st - Last)

$\Rightarrow \frac{1}{1}\left(\frac{1}{1} - \frac{1}{(n+1)}\right) \Rightarrow \left(\frac{n+1-1}{1\times(n+1)}\right) \Rightarrow \frac{n}{n+1}$

Decimal & Fraction

11. Find the value. मान ज्ञात करें.

$\Rightarrow \frac{1}{5\times 8} + \frac{1}{8\times 11} + \frac{1}{11\times 14} + \frac{1}{14\times 17}$

(3) (3) (3) (3)

$\Rightarrow \frac{1}{3}\left(\frac{1}{5} - \frac{1}{17}\right) \Rightarrow \frac{1}{3}\left(\frac{17-5}{85}\right)$.

$\Rightarrow \frac{1}{3} \times \frac{12}{85} \Rightarrow \frac{4}{85}$

(a) $\frac{4}{17}$ (c) $\frac{24}{85}$

(b) $\frac{4}{85}$ (d) $\frac{2}{85}$.

12. Find the Value of $\frac{1}{1\times 2} + \frac{1}{2\times 3} + \frac{1}{3\times 4} + \frac{1}{4\times 5} + \frac{1}{5\times 6} + \cdots + \frac{1}{9\times 10}$

$\left(\frac{1}{1\times 2} + \frac{1}{2\times 3} + \frac{1}{3\times 4} + \frac{1}{4\times 5} + \frac{1}{5\times 6} + \cdots\cdots + \frac{1}{9\times 10}\right)$ का मान ज्ञात करें.

RRB JE - 24/05/2019 (SHIFT - III)

(a) $\frac{1}{10}$

(b) $\frac{5}{11}$

(c) $\frac{9}{10}$

(d) $\frac{2}{3}$

Solve :- $\frac{1}{1}\left(\frac{1}{1} - \frac{1}{10}\right) \Rightarrow \frac{9}{10}$