



Rewrite each infinitely repeating decimal as a rational number (fraction).

Answers

1) $49.\overline{79}$

2) $0.8\overline{69}$

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

3) $3.\overline{31}$

4) $0.59\overline{54}$

5) $0.3\overline{19}$

6) $9.7\overline{35}$

7) $0.752\overline{26}$

8) $6.9\overline{61}$

9) $0.81\overline{41}$

10) $8.31\overline{51}$



Rewrite each infinitely repeating decimal as a rational number (fraction).

Answers

1) $49.\overline{79}$

$$\begin{array}{r} f = 49.\overline{79} \\ 100f = 4979.\overline{9} \\ - 10f = 498.\overline{9} \\ \hline 90f = 4482 \\ f = \frac{4482}{90} \end{array}$$

2) $0.86\overline{9}$

$$\begin{array}{r} f = 0.86\overline{9} \\ 1,000f = 869.\overline{9} \\ - 100f = 86.\overline{9} \\ \hline 900f = 783 \\ f = \frac{783}{900} \end{array}$$

3) $3.3\overline{1}$

$$\begin{array}{r} f = 3.3\overline{1} \\ 100f = 331.\overline{1} \\ - 10f = 33.\overline{1} \\ \hline 90f = 298 \\ f = \frac{298}{90} \end{array}$$

4) $0.595\overline{4}$

$$\begin{array}{r} f = 0.595\overline{4} \\ 10,000f = 5954.\overline{4} \\ - 1,000f = 595.\overline{4} \\ \hline 9000f = 5359 \\ f = \frac{5359}{9000} \end{array}$$

5) $0.31\overline{9}$

$$\begin{array}{r} f = 0.31\overline{9} \\ 1,000f = 319.\overline{9} \\ - 10f = 3.\overline{9} \\ \hline 990f = 316 \\ f = \frac{316}{990} \end{array}$$

6) $9.73\overline{5}$

$$\begin{array}{r} f = 9.73\overline{5} \\ 1,000f = 9735.\overline{5} \\ - 100f = 973.\overline{5} \\ \hline 900f = 8762 \\ f = \frac{8762}{900} \end{array}$$

7) $0.752\overline{26}$

$$\begin{array}{r} f = 0.752\overline{26} \\ 100,000f = 75226.\overline{26} \\ - 1,000f = 752.\overline{26} \\ \hline 99000f = 74474 \\ f = \frac{74474}{99000} \end{array}$$

8) $6.96\overline{1}$

$$\begin{array}{r} f = 6.96\overline{1} \\ 1,000f = 6961.\overline{1} \\ - 10f = 69.\overline{1} \\ \hline 990f = 6892 \\ f = \frac{6892}{990} \end{array}$$

9) $0.814\overline{1}$

$$\begin{array}{r} f = 0.814\overline{1} \\ 10,000f = 8141.\overline{1} \\ - 100f = 81.\overline{1} \\ \hline 9900f = 8060 \\ f = \frac{8060}{9900} \end{array}$$

10) $8.315\overline{1}$

$$\begin{array}{r} f = 8.315\overline{1} \\ 10,000f = 83151.\overline{1} \\ - 1,000f = 8315.\overline{1} \\ \hline 9000f = 74836 \\ f = \frac{74836}{9000} \end{array}$$

1.	$\frac{4,482}{90}$
2.	$\frac{783}{900}$
3.	$\frac{298}{90}$
4.	$\frac{5,359}{9,000}$
5.	$\frac{316}{990}$
6.	$\frac{8,762}{900}$
7.	$\frac{74,474}{99,000}$
8.	$\frac{6,892}{990}$
9.	$\frac{8,060}{9,900}$
10.	$\frac{74,836}{9,000}$