



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

Answers

1) $43.\overline{355}$

2) $0.81\overline{50}$

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

3) $2.604\overline{6}$

4) $1.69\overline{8}$

5) $0.3\overline{20}$

6) $7.5\overline{9}$

7) $0.62\overline{9}$

8) $1.910\overline{36}$

9) $23.3\overline{8}$

10) $0.581\overline{2}$



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

Answers

$$\begin{aligned} 1) \quad & 43.\overline{355} \\ & f = 43.\overline{355} \\ & 1,000f = 43355.\overline{55} \\ & - \quad 10f = 00433.\overline{55} \\ & \hline & 990f = 42922 \\ & f = \frac{42922}{990} \end{aligned}$$

$$\begin{aligned} 2) \quad & 0.81\overline{50} \\ & f = 0.81\overline{50} \\ & 10,000f = 8150.\overline{50} \\ & - \quad 100f = 0081.\overline{50} \\ & \hline & 9900f = 8069 \\ & f = \frac{8069}{9900} \end{aligned}$$

$$\begin{aligned} 3) \quad & 2.604\overline{6} \\ & f = 2.604\overline{6} \\ & 10,000f = 26046.\overline{6} \\ & - \quad 1,000f = 02604.\overline{6} \\ & \hline & 9000f = 23442 \\ & f = \frac{23442}{9000} \end{aligned}$$

$$\begin{aligned} 4) \quad & 1.69\overline{8} \\ & f = 1.69\overline{8} \\ & 1,000f = 1698.\overline{8} \\ & - \quad 100f = 0169.\overline{8} \\ & \hline & 900f = 1529 \\ & f = \frac{1529}{900} \end{aligned}$$

$$\begin{aligned} 5) \quad & 0.3\overline{20} \\ & f = 0.3\overline{20} \\ & 1,000f = 320.\overline{20} \\ & - \quad 10f = 003.\overline{20} \\ & \hline & 990f = 317 \\ & f = \frac{317}{990} \end{aligned}$$

$$\begin{aligned} 6) \quad & 7.5\overline{9} \\ & f = 7.5\overline{9} \\ & 100f = 759.\overline{9} \\ & - \quad 10f = 076.\overline{9} \\ & \hline & 90f = 684 \\ & f = \frac{684}{90} \end{aligned}$$

$$\begin{aligned} 7) \quad & 0.62\overline{9} \\ & f = 0.62\overline{9} \\ & 1,000f = 629.\overline{9} \\ & - \quad 100f = 063.\overline{9} \\ & \hline & 900f = 567 \\ & f = \frac{567}{900} \end{aligned}$$

$$\begin{aligned} 8) \quad & 1.9103\overline{6} \\ & f = 1.9103\overline{6} \\ & 100,000f = 191036.\overline{36} \\ & - \quad 1,000f = 001910.\overline{36} \\ & \hline & 99000f = 189126 \\ & f = \frac{189126}{99000} \end{aligned}$$

$$\begin{aligned} 9) \quad & 23.\overline{38} \\ & f = 23.\overline{38} \\ & 100f = 2338.\overline{8} \\ & - \quad 10f = 0233.\overline{8} \\ & \hline & 90f = 2105 \\ & f = \frac{2105}{90} \end{aligned}$$

$$\begin{aligned} 10) \quad & 0.581\overline{2} \\ & f = 0.581\overline{2} \\ & 10,000f = 5812.\overline{2} \\ & - \quad 1,000f = 0581.\overline{2} \\ & \hline & 9000f = 5231 \\ & f = \frac{5231}{9000} \end{aligned}$$

1.	$\frac{42922}{990}$
2.	$\frac{8069}{9900}$
3.	$\frac{23442}{9000}$
4.	$\frac{1529}{900}$
5.	$\frac{317}{990}$
6.	$\frac{684}{90}$
7.	$\frac{567}{900}$
8.	$\frac{189126}{99000}$
9.	$\frac{2105}{90}$
10.	$\frac{5231}{9000}$