



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

Answers

1) $6.152\bar{9}$

2) $0.393\bar{2}$

1. _____

2. _____

3) $9.89\bar{6}$

4) $8.607\bar{86}$

3. _____

4. _____

5. _____

6. _____

5) $5.1\bar{6}$

6) $0.574\bar{6}$

7. _____

8. _____

9. _____

10. _____

7) $33.47\bar{6}$

8) $5.58\bar{11}$

9) $15.5\bar{4}$

10) $0.42\bar{6}$



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

$$\begin{aligned}
 1) \quad & 6.152\bar{9} \\
 & f = 6.152\bar{9} \\
 & 10,000f = 61529.\bar{9} \\
 & - 1,000f = 06153.\bar{9} \\
 \hline
 & 9000f = 55377 \\
 & f = \frac{55377}{9000}
 \end{aligned}$$

$$\begin{aligned}
 2) \quad & 0.393\bar{2} \\
 & f = 0.393\bar{2} \\
 & 10,000f = 3932.\bar{2} \\
 & - 1,000f = 0393.\bar{2} \\
 \hline
 & 9000f = 3539 \\
 & f = \frac{3539}{9000}
 \end{aligned}$$

$$\begin{aligned}
 3) \quad & 9.89\bar{6} \\
 & f = 9.89\bar{6} \\
 & 1,000f = 9896.\bar{6} \\
 & - 100f = 0989.\bar{6} \\
 \hline
 & 900f = 8907 \\
 & f = \frac{8907}{900}
 \end{aligned}$$

$$\begin{aligned}
 4) \quad & 8.607\bar{86} \\
 & f = 8.607\bar{86} \\
 & 100,000f = 860786.\bar{86} \\
 & - 1,000f = 008607.\bar{86} \\
 \hline
 & 99000f = 852179 \\
 & f = \frac{852179}{99000}
 \end{aligned}$$

$$\begin{aligned}
 5) \quad & 5.1\bar{6} \\
 & f = 5.1\bar{6} \\
 & 100f = 516.\bar{6} \\
 & - 10f = 051.\bar{6} \\
 \hline
 & 90f = 465 \\
 & f = \frac{465}{90}
 \end{aligned}$$

$$\begin{aligned}
 6) \quad & 0.574\bar{6} \\
 & f = 0.574\bar{6} \\
 & 10,000f = 5746.\bar{46} \\
 & - 100f = 0057.\bar{46} \\
 \hline
 & 9900f = 5689 \\
 & f = \frac{5689}{9900}
 \end{aligned}$$

$$\begin{aligned}
 7) \quad & 33.47\bar{6} \\
 & f = 33.47\bar{6} \\
 & 1,000f = 33476.\bar{76} \\
 & - 10f = 00334.\bar{76} \\
 \hline
 & 990f = 33142 \\
 & f = \frac{33142}{990}
 \end{aligned}$$

$$\begin{aligned}
 8) \quad & 5.58\bar{11} \\
 & f = 5.58\bar{11} \\
 & 10,000f = 55811.\bar{11} \\
 & - 100f = 00558.\bar{11} \\
 \hline
 & 9900f = 55253 \\
 & f = \frac{55253}{9900}
 \end{aligned}$$

$$\begin{aligned}
 9) \quad & 15.5\bar{4} \\
 & f = 15.5\bar{4} \\
 & 100f = 1554.\bar{4} \\
 & - 10f = 0155.\bar{4} \\
 \hline
 & 90f = 1399 \\
 & f = \frac{1399}{90}
 \end{aligned}$$

$$\begin{aligned}
 10) \quad & 0.42\bar{6} \\
 & f = 0.42\bar{6} \\
 & 1,000f = 426.\bar{6} \\
 & - 100f = 042.\bar{6} \\
 \hline
 & 900f = 384 \\
 & f = \frac{384}{900}
 \end{aligned}$$

Answers

1. $\frac{55377}{9000}$
2. $\frac{3539}{9000}$
3. $\frac{8907}{900}$
4. $\frac{852179}{99000}$
5. $\frac{465}{90}$
6. $\frac{5689}{9900}$
7. $\frac{33142}{990}$
8. $\frac{55253}{9900}$
9. $\frac{1399}{90}$
10. $\frac{384}{900}$