



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

Answers

1) $3.948\overline{54}$

2) $0.69\overline{4}$

1. _____

3) $6.405\overline{9}$

4) $8.59\overline{9}$

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

5) $62.89\overline{0}$

6) $73.6\overline{8}$

9. _____

10. _____

7) $0.386\overline{53}$

8) $0.755\overline{1}$

9) $4.16\overline{63}$

10) $0.956\overline{2}$



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

Answers

$$\begin{aligned}
 &1) \quad 3.948\overline{54} \\
 &f = 3.948\overline{54} \\
 &100,000f = 394854.\overline{54} \\
 &- \quad 1,000f = 003948.\overline{54} \\
 &\hline
 &99000f = 390906 \\
 &f = \frac{390906}{99000}
 \end{aligned}$$

$$\begin{aligned}
 &2) \quad 0.69\overline{4} \\
 &f = 0.69\overline{4} \\
 &1,000f = 694.\overline{4} \\
 &- \quad 100f = 069.\overline{4} \\
 &\hline
 &900f = 625 \\
 &f = \frac{625}{900}
 \end{aligned}$$

$$\begin{aligned}
 &3) \quad 6.405\overline{9} \\
 &f = 6.405\overline{9} \\
 &10,000f = 64059.\overline{9} \\
 &- \quad 1,000f = 06406.\overline{9} \\
 &\hline
 &9000f = 57654 \\
 &f = \frac{57654}{9000}
 \end{aligned}$$

$$\begin{aligned}
 &4) \quad 8.59\overline{9} \\
 &f = 8.59\overline{9} \\
 &1,000f = 8599.\overline{9} \\
 &- \quad 100f = 0860.\overline{9} \\
 &\hline
 &900f = 7740 \\
 &f = \frac{7740}{900}
 \end{aligned}$$

$$\begin{aligned}
 &5) \quad 62.89\overline{0} \\
 &f = 62.89\overline{0} \\
 &1,000f = 62890.\overline{90} \\
 &- \quad 10f = 00628.\overline{90} \\
 &\hline
 &990f = 62262 \\
 &f = \frac{62262}{990}
 \end{aligned}$$

$$\begin{aligned}
 &6) \quad 73.6\overline{8} \\
 &f = 73.6\overline{8} \\
 &100f = 7368.\overline{8} \\
 &- \quad 10f = 0736.\overline{8} \\
 &\hline
 &90f = 6632 \\
 &f = \frac{6632}{90}
 \end{aligned}$$

$$\begin{aligned}
 &7) \quad 0.386\overline{53} \\
 &f = 0.386\overline{53} \\
 &100,000f = 38653.\overline{53} \\
 &- \quad 1,000f = 00386.\overline{53} \\
 &\hline
 &99000f = 38267 \\
 &f = \frac{38267}{99000}
 \end{aligned}$$

$$\begin{aligned}
 &8) \quad 0.755\overline{1} \\
 &f = 0.755\overline{1} \\
 &10,000f = 7551.\overline{1} \\
 &- \quad 1,000f = 0755.\overline{1} \\
 &\hline
 &9000f = 6796 \\
 &f = \frac{6796}{9000}
 \end{aligned}$$

$$\begin{aligned}
 &9) \quad 4.16\overline{63} \\
 &f = 4.16\overline{63} \\
 &10,000f = 41663.\overline{63} \\
 &- \quad 100f = 00416.\overline{63} \\
 &\hline
 &9900f = 41247 \\
 &f = \frac{41247}{9900}
 \end{aligned}$$

$$\begin{aligned}
 &10) \quad 0.95\overline{62} \\
 &f = 0.95\overline{62} \\
 &10,000f = 9562.\overline{62} \\
 &- \quad 100f = 0095.\overline{62} \\
 &\hline
 &9900f = 9467 \\
 &f = \frac{9467}{9900}
 \end{aligned}$$

1. $\frac{390906}{99000}$
2. $\frac{625}{900}$
3. $\frac{57654}{9000}$
4. $\frac{7740}{900}$
5. $\frac{62262}{990}$
6. $\frac{6632}{90}$
7. $\frac{38267}{99000}$
8. $\frac{6796}{9000}$
9. $\frac{41247}{9900}$
10. $\frac{9467}{9900}$