



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

Answers

1) $0.497\overline{71}$

2) $0.4\overline{48}$

1. _____

2. _____

3) $0.952\overline{4}$

4) $36.98\overline{2}$

3. _____

4. _____

5. _____

6. _____

5) $4.546\overline{5}$

6) $8.47\overline{4}$

7. _____

8. _____

9. _____

10. _____

7) $0.37\overline{7}$

8) $4.96\overline{8}$

9) $91.8\overline{3}$

10) $8.192\overline{13}$



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

$$\begin{aligned}
 &1) \ 0.497\overline{71} \\
 &f = 0.497\overline{71} \\
 &100,000f = 49771.\overline{71} \\
 &- \ 1,000f = 00497.\overline{71} \\
 &\hline
 &99000f = 49274 \\
 &f = \frac{49274}{99000}
 \end{aligned}$$

$$\begin{aligned}
 &2) \ 0.4\overline{48} \\
 &f = 0.4\overline{48} \\
 &1,000f = 448.\overline{48} \\
 &- \ 10f = 004.\overline{48} \\
 &\hline
 &990f = 444 \\
 &f = \frac{444}{990}
 \end{aligned}$$

$$\begin{aligned}
 &3) \ 0.952\overline{4} \\
 &f = 0.952\overline{4} \\
 &10,000f = 9524.\overline{4} \\
 &- \ 1,000f = 0952.\overline{4} \\
 &\hline
 &9000f = 8572 \\
 &f = \frac{8572}{9000}
 \end{aligned}$$

$$\begin{aligned}
 &4) \ 36.9\overline{82} \\
 &f = 36.9\overline{82} \\
 &1,000f = 36982.\overline{82} \\
 &- \ 10f = 00369.\overline{82} \\
 &\hline
 &990f = 36613 \\
 &f = \frac{36613}{990}
 \end{aligned}$$

$$\begin{aligned}
 &5) \ 4.546\overline{5} \\
 &f = 4.546\overline{5} \\
 &10,000f = 45465.\overline{5} \\
 &- \ 1,000f = 04546.\overline{5} \\
 &\hline
 &9000f = 40919 \\
 &f = \frac{40919}{9000}
 \end{aligned}$$

$$\begin{aligned}
 &6) \ 8.47\overline{4} \\
 &f = 8.47\overline{4} \\
 &1,000f = 8474.\overline{4} \\
 &- \ 100f = 0847.\overline{4} \\
 &\hline
 &900f = 7627 \\
 &f = \frac{7627}{900}
 \end{aligned}$$

$$\begin{aligned}
 &7) \ 0.37\overline{7} \\
 &f = 0.37\overline{7} \\
 &1,000f = 377.\overline{7} \\
 &- \ 100f = 037.\overline{7} \\
 &\hline
 &900f = 340 \\
 &f = \frac{340}{900}
 \end{aligned}$$

$$\begin{aligned}
 &8) \ 4.9\overline{68} \\
 &f = 4.9\overline{68} \\
 &1,000f = 4968.\overline{68} \\
 &- \ 10f = 0049.\overline{68} \\
 &\hline
 &990f = 4919 \\
 &f = \frac{4919}{990}
 \end{aligned}$$

$$\begin{aligned}
 &9) \ 91.8\overline{3} \\
 &f = 91.8\overline{3} \\
 &100f = 9183.\overline{3} \\
 &- \ 10f = 0918.\overline{3} \\
 &\hline
 &90f = 8265 \\
 &f = \frac{8265}{90}
 \end{aligned}$$

$$\begin{aligned}
 &10) \ 8.192\overline{13} \\
 &f = 8.192\overline{13} \\
 &100,000f = 819213.\overline{13} \\
 &- \ 1,000f = 008192.\overline{13} \\
 &\hline
 &99000f = 811021 \\
 &f = \frac{811021}{99000}
 \end{aligned}$$

Answers

1. $\frac{49274}{99000}$
2. $\frac{444}{990}$
3. $\frac{8572}{9000}$
4. $\frac{36613}{990}$
5. $\frac{40919}{9000}$
6. $\frac{7627}{900}$
7. $\frac{340}{900}$
8. $\frac{4919}{990}$
9. $\frac{8265}{90}$
10. $\frac{811021}{99000}$