



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

Answers

1) $0.22\overline{656}$

2) $95.7\overline{43}$

1. _____

3) $46.2\overline{8}$

4) $2.85\overline{9}$

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

5) $0.98\overline{93}$

6) $0.94\overline{1}$

9. _____

10. _____

7) $9.2\overline{5}$

8) $4.855\overline{1}$

9) $5.653\overline{95}$

10) $8.75\overline{86}$



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

Answers

$$\begin{aligned}
 1) \quad & 0.22\overline{656} \\
 & f = 0.22\overline{656} \\
 & 100,000f = 22656.\overline{56} \\
 & - \quad 1,000f = 00226.\overline{56} \\
 \hline
 & 99000f = 22430 \\
 & f = \frac{22430}{99000}
 \end{aligned}$$

$$\begin{aligned}
 2) \quad & 95.\overline{743} \\
 & f = 95.\overline{743} \\
 & 1,000f = 95743.\overline{43} \\
 & - \quad 10f = 00957.\overline{43} \\
 \hline
 & 990f = 94786 \\
 & f = \frac{94786}{990}
 \end{aligned}$$

$$\begin{aligned}
 3) \quad & 46.\overline{28} \\
 & f = 46.\overline{28} \\
 & 100f = 4628.\overline{8} \\
 & - \quad 10f = 0462.\overline{8} \\
 \hline
 & 90f = 4166 \\
 & f = \frac{4166}{90}
 \end{aligned}$$

$$\begin{aligned}
 4) \quad & 2.8\overline{59} \\
 & f = 2.8\overline{59} \\
 & 1,000f = 2859.\overline{9} \\
 & - \quad 100f = 0286.\overline{9} \\
 \hline
 & 900f = 2574 \\
 & f = \frac{2574}{900}
 \end{aligned}$$

$$\begin{aligned}
 5) \quad & 0.98\overline{93} \\
 & f = 0.98\overline{93} \\
 & 10,000f = 9893.\overline{93} \\
 & - \quad 100f = 0098.\overline{93} \\
 \hline
 & 9900f = 9795 \\
 & f = \frac{9795}{9900}
 \end{aligned}$$

$$\begin{aligned}
 6) \quad & 0.94\overline{1} \\
 & f = 0.94\overline{1} \\
 & 1,000f = 941.\overline{41} \\
 & - \quad 10f = 009.\overline{41} \\
 \hline
 & 990f = 932 \\
 & f = \frac{932}{990}
 \end{aligned}$$

$$\begin{aligned}
 7) \quad & 9.\overline{25} \\
 & f = 9.\overline{25} \\
 & 100f = 925.\overline{5} \\
 & - \quad 10f = 092.\overline{5} \\
 \hline
 & 90f = 833 \\
 & f = \frac{833}{90}
 \end{aligned}$$

$$\begin{aligned}
 8) \quad & 4.855\overline{1} \\
 & f = 4.855\overline{1} \\
 & 10,000f = 48551.\overline{1} \\
 & - \quad 1,000f = 04855.\overline{1} \\
 \hline
 & 9000f = 43696 \\
 & f = \frac{43696}{9000}
 \end{aligned}$$

$$\begin{aligned}
 9) \quad & 5.653\overline{95} \\
 & f = 5.653\overline{95} \\
 & 100,000f = 565395.\overline{95} \\
 & - \quad 1,000f = 005653.\overline{95} \\
 \hline
 & 99000f = 559742 \\
 & f = \frac{559742}{99000}
 \end{aligned}$$

$$\begin{aligned}
 10) \quad & 8.75\overline{86} \\
 & f = 8.75\overline{86} \\
 & 10,000f = 87586.\overline{86} \\
 & - \quad 100f = 00875.\overline{86} \\
 \hline
 & 9900f = 86711 \\
 & f = \frac{86711}{9900}
 \end{aligned}$$

1. $\frac{22430}{99000}$
2. $\frac{94786}{990}$
3. $\frac{4166}{90}$
4. $\frac{2574}{900}$
5. $\frac{9795}{9900}$
6. $\frac{932}{990}$
7. $\frac{833}{90}$
8. $\frac{43696}{9000}$
9. $\frac{559742}{99000}$
10. $\frac{86711}{9900}$